

The
CHEMIST and DRUGGIST

Vol. CXVI.

Annual Special Issue

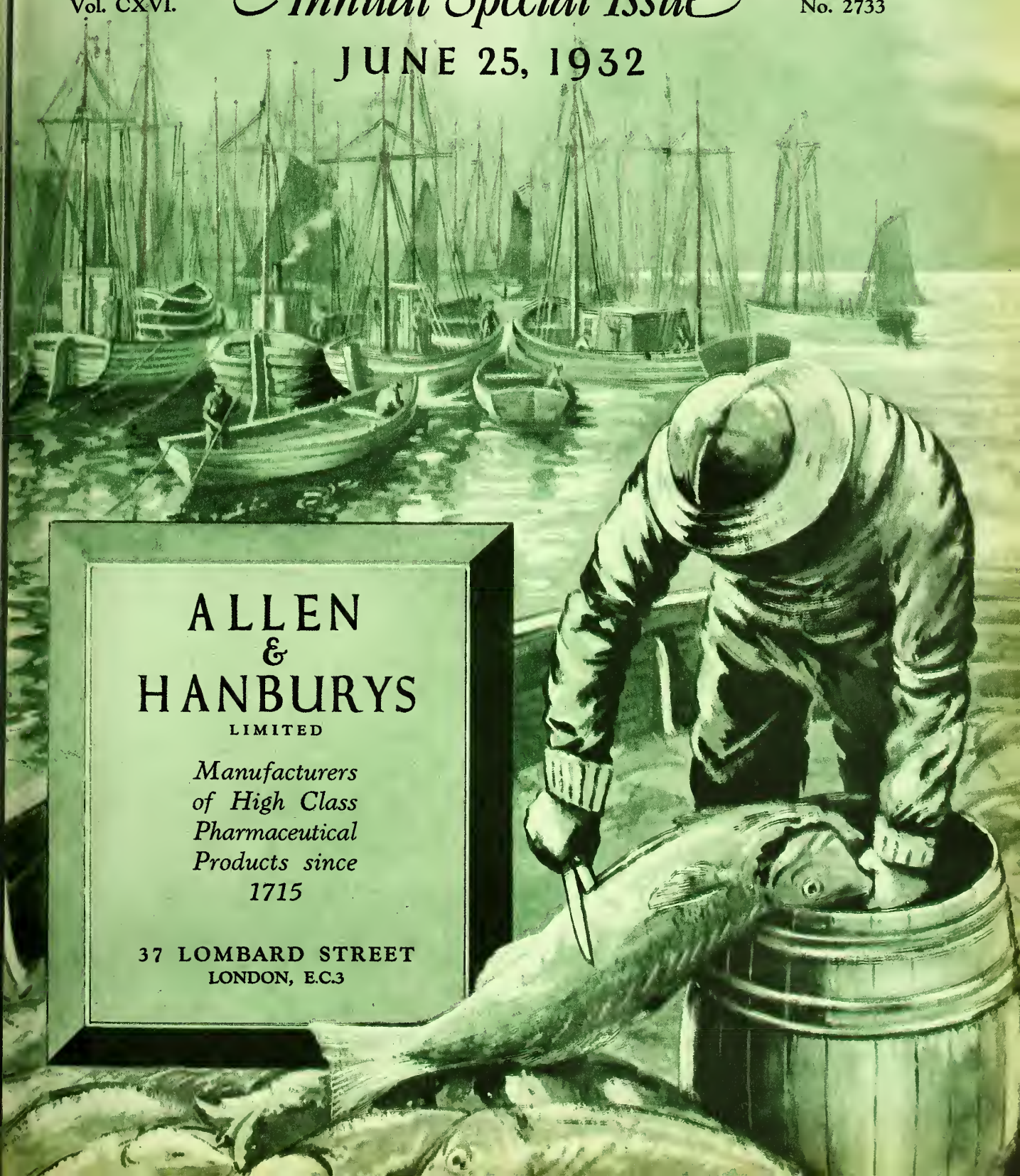
No. 2733

JUNE 25, 1932

**ALLEN
&
HANBURYS**
LIMITED

*Manufacturers
of High Class
Pharmaceutical
Products since
1715*

**37 LOMBARD STREET
LONDON, E.C.3**



100% ASPIRIN

ASPIRIN "FRE-FLO"

as the name implies

MANUFACTURED BY

W. J. BUSH & CO., LTD., LONDON

Highest chemical purity, superlatively free flowing and entirely free from the slightest trace of acetic odour before and after tableting.

The three essential requirements of the ideal ASPIRIN, embodied in one standard BRITISH product.

ASPIRIN "FRE-FLO" MAKES TASTELESS TABLETS

Samples and prices from

H. W. GRAESSER-THOMAS

100% BRITISH

**49 LEADENHALL STREET
LONDON**

Monument 2319

E.C.3

Unomee, Fen, London

Change of Address



PEPSODENT TOOTH PASTE is now manufactured at our new building, which combines offices and factory, at:

**Park Royal Road,
London, N.W.10.**

All future communications should be addressed as above.

Assembled here is the latest in modern and hygienic tooth paste production and an organisation equipped with every facility to give you a rapid, efficient service.

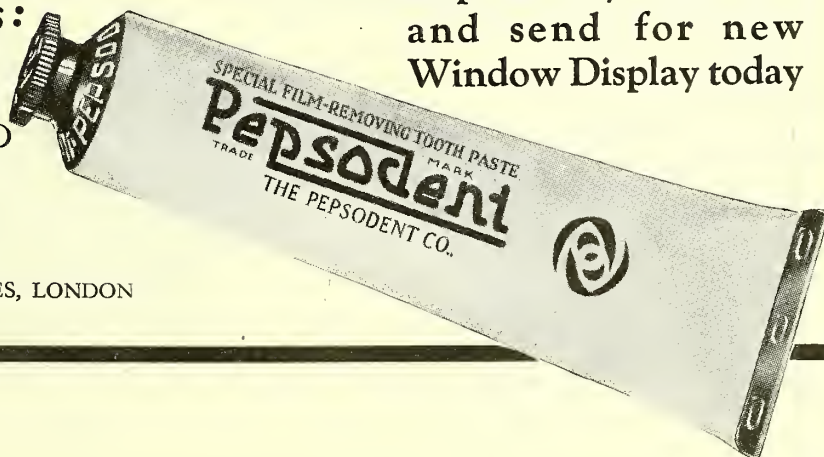
Our new address:

Offices & Factory
PARK ROYAL ROAD
LONDON, N.W.10

Telephone: WILLESDEN 4871

Telegrams: PEPSODENT HARLES, LONDON

**Replenish your stocks
and send for new
Window Display today**



SUMMER PESTS . .

*but they all keep away
from Lembenol!*

Now that it is mosquito time again, your customers will be asking you for something to prevent and relieve troublesome insect bites. Sell them LEMBENOL and earn their undying gratitude.

LEMBENOL is an anti-bite lotion made by Vinolia, and is as pleasant to use as it is effective. Refreshingly lemon-verbena scented, LEMBENOL prevents and soothes gnat, midge and mosquito bites—doesn't stain or mark any fabric. LEMBENOL is supplied in attractive sprinkler bottles, packed in display boxes, at 9/- per dozen bottles, subject to up to 10% and 2½%, retailing at 1/-. Showcards and a specimen bottle for your own personal trial can be obtained on application.

Customers who appreciate the refreshing qualities of LEMBENOL will like LEMBENA SOAP, the original Vinolia Lemon-scented Verbena Soap.

LEMBENOL

VINOLIA CO., LTD.
BEBINGTON, CHESHIRE



Do you know that

COTY

*make all these toilet
essentials in the popular*

L'AIMANT PERFUME

?

L'Aimant Face Powder - - 1'- & 1'9

L'Aimant Perfume - - - - from 3'9

L'Aimant Foundation Cream 9d, 1'3, 2'6

L'Aimant Soap - - (box of 3 tablets) 3'9

L'Aimant Bath Salts - - - - - 6'-

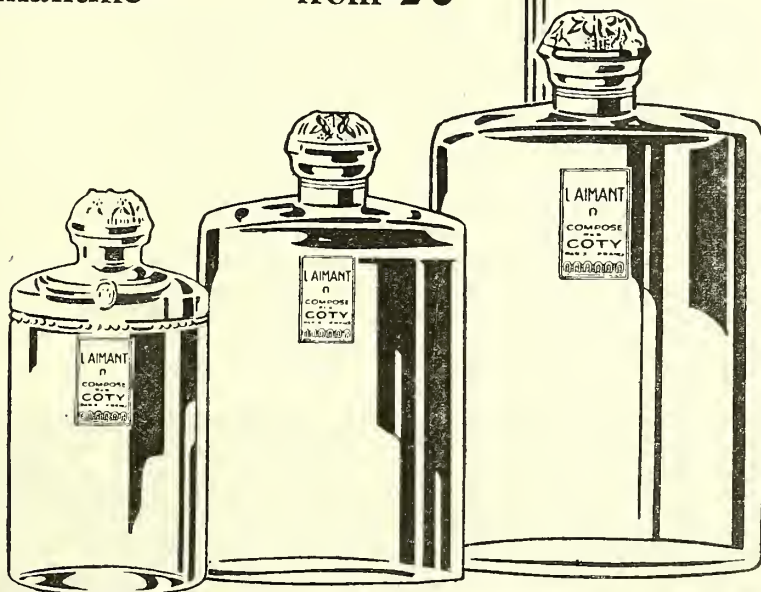
L'Aimant Bath Powder - - from 3'9

L'Aimant Brilliantine - - - from 2'6

WE are now concentrating our entire national press advertising on L'AIMANT! Link up with our advertising campaign by featuring L'Aimant in your displays.

**NO INCREASE
IN PRICE**

COTY (England) LTD., COTY HOUSE,
3, Stratford Place, LONDON. W.1
Telephone: Mayfair 7244.
Telegrams: "Paricoty, Phone, London."



The Romance of Empire Drugs (25)



Capsicum frutescens (minimum) Fam. Solanaceæ.

CAPSICUM would appear to be of American origin, there being no name for it in Sanskrit or Chinese. Springel, however, states his belief that the piperites of Pliny must refer to *Capsicum annum*. The first authentic reference to the spice is made in a letter by Chanca, physician to Columbus on his second voyage to the West Indies, and written to the Chapter of Seville. He named the plant "Agi" (1496), the present name for Capsicum in Spanish.

There are about 30 species of Capsicum, of which *Capsicum minimum* only is official in the B.P. It is mainly produced in East and West Africa and India. The fruits are generally about ½-inch long and of a dull-red appearance. *C. frutescens* is another similar variety, also largely cultivated in the tropical parts of the Empire. Modern botanists actually

CAPSICUM

Staff Allen & Sons

are favourably placed to quote for all varieties of Capsicum, for the oleo-resin and for capsin, both of which are made in their factories.

Est.



1833

consider the varieties identical and use the description *C. frutescens* only. In commerce the dried whole fruits have come to be known as "Chillies" and the ground and prepared spice as "Cayenne pepper."

Other varieties of Capsicum include *C. annum*, common or annual Capsicum, which produces fruit 2 or 3 inches in length and is less pungent than the above. *C. tetragonum*, or bonnet pepper, is popular in Jamaica. *C. cerasiforme*, cherry pepper, consists of small berries instead of pods. *C. grossum*, or bell pepper, is used in pickling and *C. baccatum*, bird pepper, is given to canaries to intensify the colour of their feathers.

Capsicum, in addition to its extensive use everywhere as a spice and condiment, is employed in internal medicine as a tonic stomachic and externally as a stimulant.

Wholesale Trade only.

STAFFORD ALLEN & SONS LTD

Manufacturing Chemists, Essential Oil Distillers.
COWPER STREET, LONDON, E.C.2.

INDEX TO ADVERTISERS

Abietan Mfg. Co., Ltd. (Sunburn Lotion) 26
 "Academic" Depôt (Rubberless Stockings) 72
 Acton Pill & Tablet Co., Ltd. lxxii
 Addis, R., & Son (Toothbrushes) 62
 Allcock Mfg. Co. (Corn Plasters, &c.) 77
 Allen, Stafford, & Sons, Ltd. (Capsicum) 4
 Allen & Hanburys, Ltd. (Pharmaceutical Products) Cover
 Anglo-French Drug Co., Ltd. (Bivato!, &c.) xli
 Antibody Products, Ltd. (Antibacyn, &c.) Leader Page
 Anzora Perfumery Co., Ltd. (Anzora Cream, &c.) 61
 Arbus, M. (D. & P. Service) ciii
 Arline Camomile Gold Hair Wash 62
 Armour & Co., Ltd. (Calf's Foot Jelly) 8
 Armstrong Cork Co., Ltd. (Corks) lxxxix
 Arnfield, J. C., & Sons, Ltd. (Raspberry Vinegar, &c.) 40-iii
 Askit, Ltd. (Headache Powders) 98
 Austin, S., & Sons, Ltd. (Oriental Printers) 117
 Automatic Novelty & Development Agency (Weighing Machines) 30
 Autoway Co. (Dual Weighing Machines) 56
 Avenue Press, The (Printing Specialists) 82
 Ayrton-Graham, Ltd. (Shopfittings) lxxxi
 Ayrton, Saunders & Co., Ltd. (Wholesale Druggists) 48-49
 Bailey, R., & Son, Ltd. (Surgical Dressings) xix
 Baiss Bros. & Co., Ltd. (Drugs, &c.) lxxiii
 Bakelite, Ltd. (Bakelite Bottle Caps) cv
 Baker Metal Stopper Co., Ltd. (Screw Caps, &c.) xlviii
 Bandoeng Quinine Factories (Quinine and Salts) xxiv
 Barker, R., & Son, Ltd. (Infants' Preservative) li
 Barker, R. W., & Co. (Patent Agents) Leader Page
 Barrett Proprietaries, Ltd. (Pharmaceutical Products) 91
 Battle, J. C. M. (Vermin Killer) xcii
 Bayer Products, Ltd. (Pharmaceutical Products) 104
 Beatson, Clark & Co., Ltd. (Bottles) lxxx
 Beechams Pills, Ltd. (Pills and Powders) 99
 Bell, John, Hills & Lucas, Ltd. (Pharm. Preps.) Leader Page
 Benbow's Dog Mixture Co. (Veterinary Preps.) lxxii
 Benckiser, J. A. (Tartaric Acid, &c.) xxiv
 Bengers Food, Ltd. (Foods) 122-123
 Bennett, Sons, & Shears, Ltd. (Machinery) lxxvi
 Berton, Arthur, Ltd. (Hot Water Bottles) 70
 Betts & Co., Ltd. (Collapsible Tubes) lxxxi
 Bishop, Alfred, Ltd. (Fruit Saline, &c.) xiv-xv
 Blackie, R. (Spun Ointments) 112
 Blackwell, Hayes & Co., Ltd. (Packed Goods) 100
 Blythe, W., & Co., Ltd. (Chemicals) vi
 Blyton, Astley & Co., Ltd. (Lozenges) xlii
 Bob Martin, Ltd. (Dog Remedies) xciii
 Bourjois, A., et Cie, Ltd. (Toilet Preparations) 59
 Box, W. H. (Box's Pills) xxvi
 Brady & Martin, Ltd. (Galenicals) lxxix
 Bredt, W., Ltd. (Medicinal Products) xxv
 Bristow, T. F., & Co., Ltd. (Beauty Cream) 25
 British Celanese, Ltd. (Bottle Cap-ping) civ
 British Drug Houses, Ltd. 105-108
 British Felsol Co., Ltd. (Asthma Remedy) Leader Page
 Brittain, J. Hart, Ltd. (Kotakol) lxx
 Britton, Malcolm & Waymark, Ltd. (Druggists' Sundries) 72
 Brook, Parker & Co., Ltd. (Dutch Drops) xxix
 Brooks, Haywood & Co., Ltd. (Razor Blades) 58
 Brown & Son, Ltd. (Stills) civ
 Buckley-Bowker Tablet Co., Ltd. (Tablets) xxviii

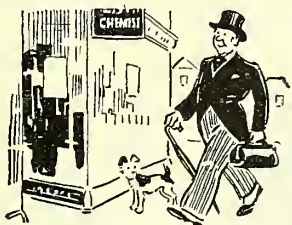
Budnip, Ltd. (Powders) lxxii
 Bural Bros. (D. & P. Books) xcvi
 Burrough, J., Ltd. (Alcohol, &c.) 113
 Burroughs Wellcome & Co. (First Aid Outfits) 121
 Bush, W. J., & Co., Ltd. (Otto of Rose) 55
 Bussell, T. C. (Bottle Caps) lxxiii
 Butywave Co. (Shampoo Powder) 54
 Caldicot Tin Stamping Works, Ltd. xcvi
 Callard & Co. (Diabetic Foods) 1
 Calvert, F. C., & Co., Ltd. (Pumice Soap) xxx
 Camella Sales Dept. (Sanitary Towels) lxx
 Carnegie Bros., Ltd. (Chemicals, &c.) vii
 Carter Bros. Atlas Kattlecure, &c.) xxvi
 Cartwright, W. B., Ltd. (Moorland Tablets) 9
 Castle Huskisson, Ltd. (Tablets) xxviii
 Cataline Co. (Veterinary Medicines) xcii
 Cavendish Chemical Co. (New York), Ltd. xxvii
 Cellophane Co., Ltd. (Wrapping) ci
 Cephos, Ltd. (Headache Remedy) 65A
 Charles Roger Laboratories, Ltd. 54
 Christy, T., & Co. (Py-shan Points Tea, Cachet Machines, &c.) 52-112-cii
 Clark, C. S. (Cachets) li
 Constipon Laxatives xviii
 Continental Laboratories, Ltd. (Uralysol) xxix
 Cook, Geo. (Shopfittings) lxxx
 Cooper Laboratory, Ltd. Leader Page
 Cooper, Son & Co., Ltd. (Cachets) 102
 Cora Hotel 60
 Corfield, Ltd. (Aluminium Containers) xcix
 Coty (England), Ltd. (Toilet Preps.) 3
 Cox, Arthur H., & Co., Ltd. (Aspirin Tablets, &c.) xvi-xvii
 Cromessol Co. (Disinfectants) 100
 Crookes Laboratories (Collosol (Chlor-Caroacrol) xxvii
 Cupal, Ltd. ("Secto") 20
 Curtis, A. B. (Perfumery, &c.) 60
 Cussons, Sons & Co., Ltd. (Ravon Series) 16
 Dae Health Laboratories, Ltd. (New White Veet) 14
 Dalmas, A. de St., & Co., Ltd. (Malt Extract, &c.) lvii
 Davenport, J. T., Ltd. (Chlorodyne) xxx
 Davidson, Wm., Ltd. (Chemicals, &c.) 92
 Dearborn (1923), Ltd. (Toilet Specialities) 32
 Delf, W. M., & Co. (Soap Manfrs.) 26
 Dee Oil Co., Ltd. (Petroleum Jelly) ix
 Demuth, R. (Prozocone, &c.) 28-29
 Dhaussy Powder Box Co., Ltd. 24
 Dick, W. B., & Co., Ltd. (Liq. Par.) lviii
 Dickeson, R., & Co. (Besorbon) xxix
 Dimol Laboratories, Ltd. (Pulverettes, &c.) cvi
 Dixor, Ltd. (Toilet Preparations) 24
 Dols' Volatile Flannel, Ltd. 98
 Dominion Steel Corporation, Ltd. (Razor Blades) 58
 Dubarry Perfumery Co., Ltd. (Toilet Luxuries) Cover
 Dudley & Co., Ltd. (Counter Display Stand) 60
 Duncan, Flockhart & Co. (Anæsthetic Ether, &c.) iv-v
 Eade, Geo., Ltd. (Rheumatic Pills) lxx
 Edwards Harlene, Ltd. (Toilet Preps.) 63
 Edwards, Wm., & Sons (Service) 73
 Ellams & Co. (Printing) Col. Supp.
 Ellis, J. E., Ltd. (Daisy Headache Powders and Tablets) xliii
 Endocrines, Ltd. (Endocrine Products) 97
 Energen Foods Co., Ltd. (Energen Marmalade) 47
 Esperis (Italian Essential Oils) 26
 Essences & Synthetics, Ltd. (Essential Oils) cii
 Eucryl, Ltd. (Dentifrices) 61
 Evans, Adlard & Co., Ltd. (Filter Papers) lxxiii
 Evans, Gadd & Co., Ltd. (Drugs, &c.) ii
 Evans, Sons Lescher & Webb, Ltd. (Midge Cream) 13
 Fairchild Bros. & Foster ("Panopepton") Leader Page
 Fairy Dyes, Ltd. (Dyes) 77
 Fecher M. J., Ltd. (Glassware) lxxxii
 Fink, F., & Co. (Gums) cii
 Ford, Shandland & Co., Ltd. ("Solvo" Toilet Paper) lxxiii

Freudentheil, Smith & Co. (C.L.O.) .. lix
 Fulford, C. E., Ltd. (Zam-Buk) xxxi
 Galen Products Co., Ltd. (Glycerine and Blackcurrant Pastilles) 118
 Gannett Trading Co. ("Fastech") 60
 Gardner, Wm., & Sons (Gloucester), Ltd. (Grinding Machines, &c.) lxxix
 Garfield Tea Co. xxix
 Gem Automatic Weighing Machine Co., Ltd. civ
 Genatosan, Ltd. (Genozo, &c.) xlvii
 Goddall, Backhouse & Co. (Packed Drugs) 50
 Gollin & Co. Pty., Ltd. (Aspro) xlv
 Graesser-Thomas, H. W. (Aspirin "Fre-Flo") Cover
 Greeff, R. W., & Co., Ltd. (Quinine, &c.) 22-23
 Griffin & Tatlock, Ltd. (Pharmaceutical Machinery) lxxiv
 Grout & Co., Ltd. (Crêpe Bandages) lxxvi
 Guest, H. Marcel, Ltd. cii
 Hack, Edward (Anti-Thrax Shaving Brushes) cii
 Hall, Forster & Co., Ltd. (Vaporisers) lxxlii
 Haller Laboratories, Ltd. (Danysz Virus) xcii
 Hampshire, F. W., & Co. (1927), Ltd. (Wasp Flyband) 92
 Hampson, Fredk. (British Bottles) .. cvii
 Hanson, W., & Sons, Ltd. (Glassware) lxxxii
 Harkness, Beaumont & Co., Ltd. (Malt Specialities, &c.) xiii
 Harley, T. (Rodine) xcvi
 Harris, Hart & Co., Ltd. (Glauber Salts, &c.) lxxxviii
 Harris, J., & Co. (Advertising Balloons, &c.) lxxviii
 Harrison, A., & Sons, Ltd. (Printing) xci
 Harry J. Campbell & Co. ("Glandestrin" Products) xl
 Harvey & Co. (Dublin), Ltd. (Vety.) xcvi
 Haywood, J. H., Ltd. (Surgical Appliances) lxxvii
 Hewlett, C. J., & Son, Ltd. (Wholesale Druggists) liii-lvi
 Hill, Thos., Engineering Co. (Hull), Ltd. (Bottle Washing Machinery) lxxxiv
 Hinksman & Forrest, Ltd. (Asthma Reliever) 94
 Hirst, Brooke & Hirst, Ltd. (New Works) 45
 Hobson, J., & Son, Ltd. (Black Beer) lix
 Hobson, Trimble & Co., Ltd. (Feet Plasters, &c.) lxxlii
 Hoffmann-La Roche Chemical Works, Ltd. (Pharmaceutical Products) 101
 Holroyd's Oil & Ceresine Co., Ltd. cii
 Hopkin & Williams, Ltd. (Chemicals) ii
 Hornby & Co. (Hull), Ltd. (Tins) xcvi
 Household Products (Disinfectant) xcii
 Howard Lloyd & Co., Ltd. (Tablets) xli
 Howarths (Cochroach Exterminator) lxxii
 Hubback, T., & Son, Ltd. (Oxide of Zinc) xxii
 Igloodine Co., Ltd. (Igloodine) xxvii
 Iford, Ltd. (Selo Films) cviii
 Ingram, J. G., & Son, Ltd. (Surgical Rubber Products) lxxv
 International Bottle Co., Ltd. (Toilet Bottles) 46
 Irvings Yeast-Vite, Ltd. 93
 Jackson, Ernest, & Co., Ltd. (Glossettes, &c.) xlii
 Jackson, J. P., & Co., Ltd. (Mchv.) lxxvi
 Jeffreys, Miller & Co., Ltd. (Malt Extract, &c.) 42-43
 Johns, Son & Watts, Ltd. (Cartons) xcvi
 Johnson & Sons Manufacturing Chemists, Ltd. (Emulsions, &c.) iii
 Jones, Samuel, & Co., Ltd. (Sealing Machine) cv
 Josephs, Philip, & Sons, Ltd. (Shop-fittings) xx
 Kaydor Ltd. (Morfi Rubber Prod.) lxxiii
 Kert, G. B., & Sons, Ltd. (Brushes) 54
 Kilgerrm Co., Ltd. (Disinfectants) 102
 King, J. C., Ltd. (Showcases) 72
 Kinross, A. (Printing) civ
 Kof-oh Co., Ltd. (Proprietaries) 92
 Lamb & Watt, Ltd. (Chemists' Wines) 1
 Langbeck & Co., Ltd. (Transparent Wrapping Material) xcix
 Lauder, L. T. (Machinery) lxxvi
 Lawrence, G. H., Ltd. (Razor Blades) 58

(Continued overleaf.)

INDEX—cont.

Lax & Shaw, Ltd. (Bottles)	19	Park, Buckeridge & Co., Ltd. (Lanoline Toilet Preps.)	lxxii	Soc. voor. Chem. Ind. Katwijk (Caffeine, &c.)	viii
Lee, R. (Manicure Requisites)	30	Parkinsons, Ltd. (Popular Pills) ..	xxxvi	Solazzi (Liquorice)	xxvii
Leigh, R. & H., & Sons, Ltd. (Carboy Hampers)	lxxiv	P.A.T.A. Patent Phosphates & Merchandise, Ltd. (Sugar Crystals)	x	Solport Bros., Ltd. (Sundries)	75
Lennon, Ltd. (South African Agencies) ..	ii	Paterson, W., & Sons (Aberdeen), Ltd. (Emulsions, &c.)	96	Sonplex, Ltd. (Safety Razor Blades) ..	58
Levermore, A., & Co., Ltd. (Precipitated Chalk)	x	Pepsodent Co. (Change of Address) ..	1	Southall Bros. & Barclay, Ltd. (Olive Oil, &c.)	10-lxxviii
Lewis, H. K., & Co., Ltd. (Books)	xc	Perken, Son, & Co., Ltd. (Clinical Thermometers)	lxviii	South of England College of Pharmacy	xc
Leyland & Birmingham Rubber Co., Ltd. (Rubber Sundries) ..	lxxxv-lxxxvii	Perry & Hope, Ltd. (Phosphate of Soda)	cii	Speer, W. R., & Son (Toothbrushes) ..	30
Lighthown, J. W., & Sons, Ltd. (Grips Pastilles)	xlii	Perry's Powders, Ltd.	xxvi	Spencer, Isaac, & Co. (Aberdeen), Ltd.	xxxviii
Lincoln & Midland Counties Drug Co., Ltd. (Clarke's Blood Mixture) ..	xliv	Photopress (Developing, &c.)	ciii	Stapleton & Son (Archanium)	xxvi
Lipovac Flasks, Ltd. ("Hardglas" Flasks)	76	Piesse & Lubin, Ltd. (Bath Crystals, &c.)	15	Stemco, Ltd. (Flit)	116
Litto Laboratories (Hair Preps.)	26	Pifco, Ltd. (Dry Batteries)	cii	Sterns, Ltd. (Oils, Petroleum)	ix
Liverpool School of Pharmacy	xc	Pindar, J. W., & Co. (Machinery) ..	lxxv	Stevens & Manning (Sieves, &c.)	94
Lloyd, Almee, & Co., Ltd. (Euxesis) ..	57	Pitman, Sir Isaac, & Sons, Ltd. (Books)	xvii	Stevenson, H. E., & Co. (Essences, &c.)	95
Lofthouse & Saltmer, Ltd. (Losal's Salt)	100	Pollard, E., & Co., Ltd. (Shopfittings) ..	lxxxv	Sturge, J. & E., Ltd. (Precip. Chalk) ..	xxi
London Capsule Co. (Bottle Caps)	lxxxv	Pomona Soap, Ltd. (Toilet Soaps)	44	Sudex Co. (Senna Pods)	xxviii
London College of Pharmacy	xc	Preemo Co. (Perfume Essences)	53	Surgical Hosiery Co., Ltd.	lxii
London Essence Co., Ltd. (Packed Goods)	Leader Page	Pontampon Co.	lxxii	Suter A. F., & Co., Ltd. (Gums)	viii
Macandrews & Forbes, Ltd. (Apollo Liquorice)	x	Poth, Hille & Co., Ltd. (Waxes)	lviii	Sutley & Silverlock, Ltd. (Advertising Scheme)	xxvii
Macfarlan, J. F., & Co. (Ether, &c.) ..	68	Potter & Clarke, Ltd. (Wholesale Druggists)	83-90	Swin, J., & Son, Ltd. (Blockmakers) ..	cii
Mallinckrodt Chemical Works, Ltd. (Chemicals)	vi	Potter & Moore, Ltd. (Price Reduction)	33	Taylor, John (Cimolite Toilet Preps.) ..	52
Manchester Tutorial College .. Col. Supp.		Prescott, A. (Cocoa Butter, &c.)	x	Teadales Chlorodyne Co. (Chlorodyne) ..	xxix
Mandall & Co., Ltd. (Licorice)	xxvii	Prescriber, The	ii	Tenz Manig. Co. (Tablets)	xxviii
Marie Antoinette Co. (Morgan's Pomade, &c.)	lxxi	Proprietary Agencies, Ltd. (Milk of Magnesia)	122	Tetlow, Henry, Co., Ltd. (Swandown Face Powder)	61
Mather, William, Ltd. (Adhesive Plaisters)	xxxviii	Prunol Products, Ltd. (Prunol Pastilles)	xliv	Thew, Partridge & Co., Ltd. (Shellac, &c.)	cvi
Matthews & Wilson (1931), Ltd. (Pills and Tablets)	xxviii	Pure Russian Liquid Paraffin Co., Ltd.	lx	Thompson & Capper Wholesale, Ltd. (Stokes Stills)	119
Matthews, D., & Sons (Shopfittings) ..	xxvi	Raimes, Clark & Co., Ltd. (Manufacturing Chemists)	98-cvi	Thompson, John (W.D. 1921), Ltd. (Olive Oil, &c.)	58
Matthews Laboratories, Ltd. (Puritan Salts)	Leader Page	Raleigh Cycle Co., Ltd. (Motor Delivery Van)	115	Thornton & Ross, Ltd. (Ammonia, &c.) ..	41
Matthews, S., & Co., Ltd. (Curicones) ..	lxxi	Rankin & Co. (Head Ointment)	lxxi	Thurley, G. E., & Son (Liquid Paraffin)	96
Maud, F., & Berg, E., Ltd. (Showcases)	xcvi	Ransom, W., & Son, Ltd. (Solid Extracts, &c.)	114	Tilbury, W. R., & Son (Tooth Brushes) ..	56
Maw, S., Son & Sons, Ltd.	11	Rayeast, Ltd. (Vitamin Food)	lii	Tokalon, Ltd. (Bonus Offer)	51
Maxwell, Plaistowe & Co., Ltd. (Sandalwood Oil)	vi	Reade, B.S. & Co., Ltd. (Headache Powders)	xvii	Tolkien, C., & Co., Ltd. (Malt Ex.) ..	lix
May, Roberts & Co., Ltd. (Sundries) ..	7	Richter, Gedeon, Ltd. (Glandular Products)	cvi	Tomlinson & Hayward, Ltd. (Dairy Helps, &c.)	xv
McCaw, Stevenson & Orr, Ltd. (Secotinic)	94	Ripplin, A. J., Ltd. (Drugs)	viii	Toogood, Wm., Ltd. (Insect Bite Stick) ..	62
Meggesson & Co., Ltd. (Medicated Lozenges, &c.)	36-37	Rivista Italiana delle Essenze e Profumi	xxiv	Towel Pill & Tablet Co., Ltd. (Pills) ..	xlvi
Methylating Co., Ltd. (Methylated Spirit)	81	Roberts & Co. (Robuval, &c.)	xxvi	Town Talk Polish Co. (Liquid Silver Polish)	lxxviii
Metropolitan-Vickers Electrical Co., Ltd. (Cosmos Lamps)	xc	Roberts & Sheppey, Ltd. (MelRose) ..	xxvii	Treble & Co. (Shopfittings)	xxii
Midgley & Parkinson, Ltd. (Yeast Preps.)	lix	Roberts' Patent Filling Machine Co. ..	lxxv	Tucker, A. C., & Co. (Asthma Remedy)	lxx
Millar, A., & Co., Ltd. (Orange Wine)	lj	Robinson & Sons, Ltd. (Su-Can Sanitary Towels, &c.)	78-79-c	Tyrer, T., & Co., Ltd. (Chemicals)	ix
Mills, J. M., Ltd. (Methylated Spirit)	lviii	Rodgers, J., & Sons, Ltd. (Scissors) ..	52	United Chemists' Association, Ltd. (Health Salts)	12
Miss Muffet Toilet Paper Co., Ltd. ..	76	Ronaldson, J., & Co. (Senna)	cii	United Glass Bottle Manufacturers, Ltd. (Medical Bottles)	17
Mitchell, N. W., & Snow, Ltd. (Corks)	lxxxii	Rose, J. L., Ltd. (Pyrogallol Acid) ..	iii	Vareen, Ltd. (Nail Polish)	52
Molson Ionized Iodine Co., Ltd.	102	Roura & Forgas (Quicksilver)	xii	Veldt Laboratory (Veldt Cream)	ciiii
Monsanto Chemical Works, Ltd.	69	Rowland, A., & Sons, Ltd. (Macassar Oil)	24	Veno Drug Co. (1925), Ltd. (Veno Products)	111-lxxxvii
Mosans Quinine Pessaries	lxi	Rowlandson, W., & Co. (Mixing Machines)	lxxxv	Viggormalt, Ltd. (Malt Extract and Hops)	1
Mundet Cork Products, Ltd. (Bakelite Stoppers)	lxxxiii	Rozalex, Ltd. ("Rozalex")	cii	Vinolia Co., Ltd. (Lembenol)	2
Munns Bros., Ltd. (Photographic)	cli	Rutherford, J., & Co. (Toilet Paper) ..	74	Viscose Development Co., Ltd. (Bottle Capping)	lxxxiii
Murray, S., & Co., Ltd. (Glassware) ..	xxv	Sandoz Chemical Works (Panthesin Brand Balm)	i	Wagner, R. V. (Bottle Caps)	lxxxviii
Myers, E. J. (Shopfittings)	lxxxiv	Sangers, Ltd. (Sundries Service)	69	Waide, Thos., & Sons, Ltd. (Printers) ..	80
Mysore, Trade Commissioner for, in London (Sandalwood Oil)	18	Sasso, P., & Figli (Olive Oil)	120	Walden, Walden & Co. (Nufix Hair Cream)	32
Napp, H. R., Ltd. ("Normacol")	65	Saville Perfumery, Ltd. (Rola Non-Spill Powder Box)	31	Ward, T., & Sons, Ltd. (Wardonia Razor)	54
National Cash Register Co., Ltd.	c	Scholl Manfg. Co., Ltd. (Foot Specialities)	lxiii	Webster, T., & Co., Ltd. (Stoppers)	94
Newball & Mason (Extract of Herbs) ..	xlvi	Schutz, F., & Co., Ltd. (Surgical Appliances, &c.)	lxii	Westminster College of Pharmacy	xc
Newbery, F., & Sons, Ltd. (Packed Goods)	60	Scott & Bowne, Ltd. (Williams' Shaving Preparations, &c.)	34-35	Westminster Laboratories, Ltd. (Dr. I. Brook's Tablets)	xxxii
Newcastle-on-Tyne Zinc Oxide Co., Ltd.	viii	Scruton, O., & Co. (Nurse Harvey's Mixture)	102	Whey Products, Ltd. (Milk Sugar)	102
New Era Treatment Co., Ltd. (Elasto)	lxx	Scurr, C. A. (Optical Tintion)	xc	Whiffen & Sons, Ltd. (Chemicals)	39
Nippon Shinyaku Co. (Cancer Treatment)	xxxii	Seven O Seven, Ltd. (Gland Treatment)	xxx	Whitaker & Co. (Kendal, Ltd. (Hats, Dyes, Household Dyes)	71
North British Rubber Co., Ltd. (Hot Water Bottles)	67A	Sealjoy Co. (Seasickness Remedy)	96	White, J. F., & Co. (Kompo)	xxx
Numol, Ltd. (Pinctylus Pastilles)	cii	Shadeford Co. (Hair Dyes)	cli	White, Tomkins & Courage, Ltd. (Ionones)	xxii
Ocean Blades (Gin. Britain), Ltd.	56	Shadforth Prescription Service (Blue Lion Fox Nuts, &c.)	68A	Wilkinson, James F. (Printing)	c
Oldfield, Pattinson & Co. (Pharm. Preps.)	96	Shaving Brushes, Ltd. (Shaving Brushes)	56	Wilkinson, S. W., & Co. (Rotary Tablet Machines)	lxxxvii
Old Strand Chem. & Drug Co., Ltd.	xii	Sherley, A. F., & Co., Ltd. (Competition)	xcvii	Willows, Francis, Butler & Thompson, Ltd. (Galenicals, &c.)	110
Olley, C., & Sons, Ltd. (Corks)	lxxx	Sier, Voss & Tones (Transparit)	Leader Page	Wood Bros. Glass Co., Ltd. (Glassware)	lxxxiv
Oppenheimer, Son & Co., Ltd. (Roboleinc)	lxviii	Silks Toilet Co. (Silkodono, &c.)	53	Woodrow, H. T., & Co., Ltd. (Poisons Registers)	xcvi
Optical Press, The (Printing)	cii	Silvertown Lubricants, Ltd. (Liquid Paraffin)	lxi	Woolley, J., Sons & Co., Ltd. (Liver Extract)	109
Oralite Co., Ltd. (Denture Soap)	21	Sim, Ltd. (Ampoule Files)	xxix	Wright, Layman & Umney, Ltd. (Lysol, &c.)	Cover
Orridge & Co. (Valuers, &c.)	xciv	Simpkin, A. L., & Co., Ltd. (Confectionery)	iii	Wrigley, Paterson & Co., Ltd. ("Superlin" Disinfectants)	xxv
Owen, W., & Son (Lucozade)	lix	Singleton & Cole, Ltd.	cii	Wyleys, Ltd. (Pharmaceuticals)	103
Owl Photographic Service	ciii	Smith, Martin H., Co. (Ergoapil)	xxx	Yardley & Co., Ltd. (Price Reduction) ..	27
Paine & Co., Ltd. (Malt Specialities) ..	li	Smith, T. & H., Ltd. (Alkaloids)	xxxv	Youldon, F., Ltd. (Bottles)	lxxxii
Paines & Byrne, Ltd. (Glandular Products)	cvi	Smith, T. J., & Nephew, Ltd. (Elastoplast Specialities)	66A-67	Zeal, G. H., Ltd. (Clinicals)	lxvii
				Zimmermann, A. & M. (Chemicals)	ii
				Zimmermann, C., & Co. (Chem.), Ltd. (Chemicals, &c.)	xi



This is the Doctor, tall and fine,
Who went to a shop for a certain line.



This is the Chemist, a little disturbed,
Because of the line he had never heard.



This is the List, quite up-to-date,
Where he found the line, we are glad to relate.



This is the Maid, so clear in tone,
Who took the order on the 'phone.



This is the Van which sped away,
And delivered the goods the very same day.



This is the Chemist, filled with joy,
Sending the parcel by his boy.



This is the House that issued the List—that used the 'phone—that worked the goods—that sent the van—that pleased the man and thus trade built.

8^{D.}
PROFIT
 ON
 AN
OUTLAY
 OF
10^{D.}
 OR
80%



SOLD
BY
CHEMISTS
ONLY

MADE
IN
OUR
LABORATORIES
IN
SURREY

Retail Price 1/6 per Jar.

Chemists' Price 10/- per doz.

LABORATORY DEPARTMENT
ARMOUR AND COMPANY
 LIMITED

**ARMOUR HOUSE, St. MARTIN'S-LE-GRAND,
 LONDON, E.C.1.**

TELEGRAMS: "ARMOSATA-CENT," LONDON.
 TELEPHONE: NATIONAL 2424.

For the last
3 YEARS

The Sales of
MOORLAND

(BRAND)

INDIGESTION
TABLETS

Have
increased every month
without a break

Are *YOU*
Displaying this Regular
Money-Maker ?

WINDOW DISPLAYS of SOUTHALLS "A1" OLIVE OIL



Include

—SPRAYS of OLIVES
(Artificial)

—GLOBES of RIPE LUSCIOUS OLIVES

DISPLAY IT NOW



The Best
to Recommend for
MEDICINAL USE
SALAD DRESSING
CULINARY and
TOILET
PURPOSES

Minimum Retail Prices (P.A.T.A.) 9d.	Per Bottle		
	1/3	2/3	4/-
	Per Dozen		
	6/-	9/-	16/- 29/-
Orders Value £2 : 10 . 0 ..	5/9	8/9	15/3 27/6
Orders Value £5 : 0 : 0 ..	5/6	8/6	14/6 26/-
Bulk .. 15/- per gallon	14/- in 5 gallon lots		

The above prices are subject to a discount of 2½% on payment before 15th of Month following date of invoice.

RECIPE BOOKLET

(12 pages)

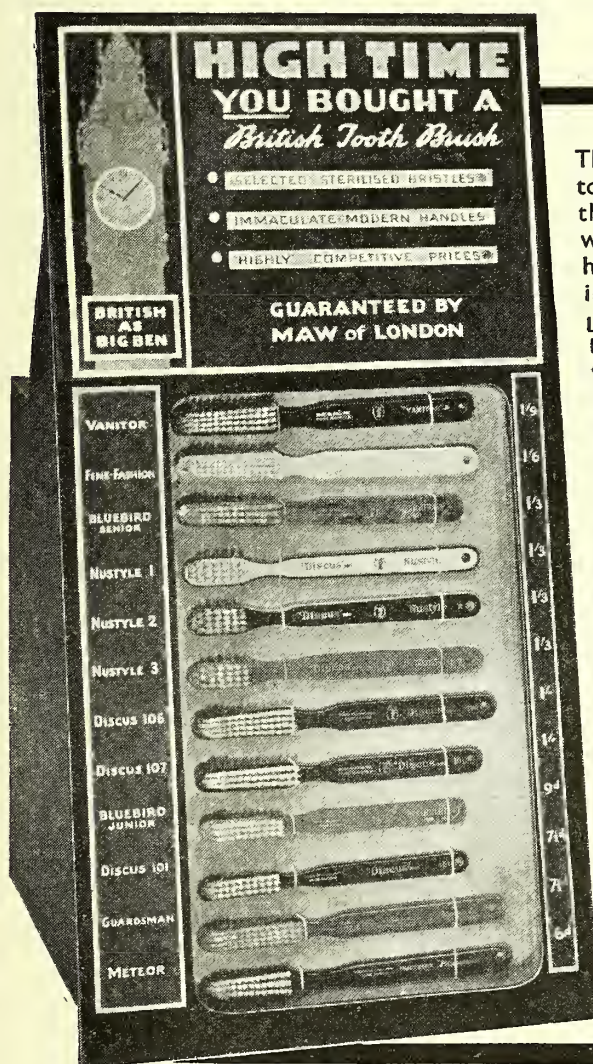
WITH EVERY BOTTLE

BOOK YOUR CONTRACT IMMEDIATELY

SOUTHALL BROS. & BARCLAY, Ltd., BIRMINGHAM

QUICK SALES QUICK SERVICE

73% PROFIT ON COST



There was never such urgent and dire need to protect your tooth brush business from the attacks of outside competitors. Never was it more vitally necessary to keep your hold on this regularly repeating and constantly increasing business.

Look to the future: see that your tooth brush business does not go the way of other lines which once belonged wholly to the chemist.

The High Time Tooth Brush Case will help you to put a wall round your tooth brush business; to capture and to hold tooth brush customers for good.

It keeps a fine range of splendid tooth brush patterns at prices from 6d. to 1s. 9d. before your customers and it helps you to make **QUICK SALES.**

It keeps your stocks immediately accessible in the inbuilt stock cabinet, and so enables you to give **QUICK SERVICE.**

And, as well as ensuring future business, on every sale you make an immediate profit which makes High Time business really worth doing—**73% ON COST.**

Yours free of all cost with an order for 1 gross assorted tooth brushes costing only £4-8-0.

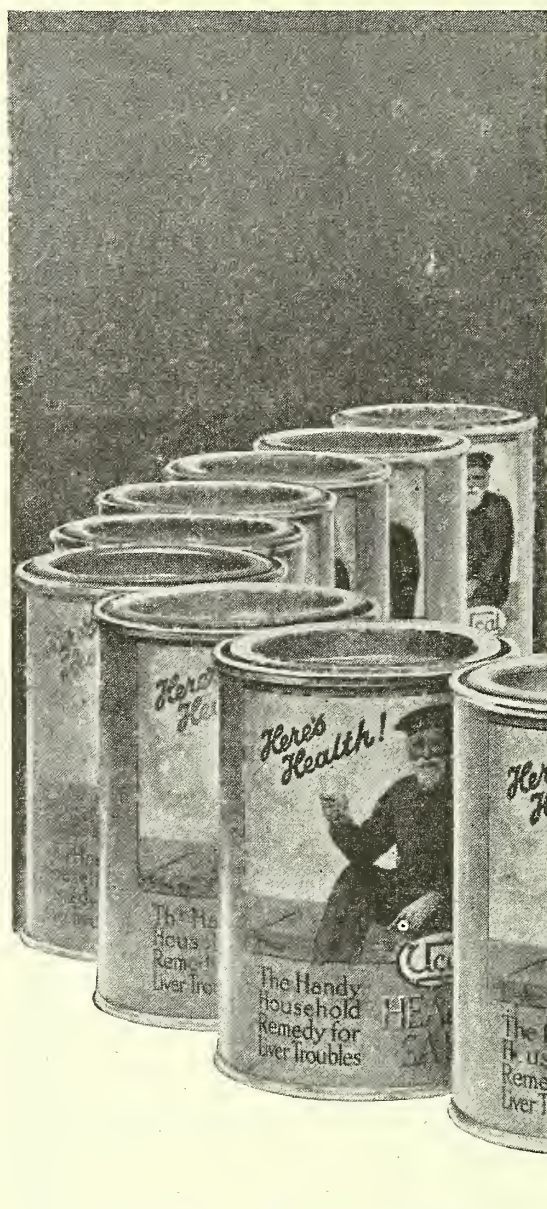
MODERN QUICK SELLING SILENT SALESMAN OF POLISHED WOOD, WITH INBUILT STOCK CABINET.

Occupies only 10½" x 11½"—less than one square foot of counter space.

BRUSHES AT REGULAR WHOLESALE PRICE—NO CHARGE FOR CABINET.

BRITISH MADE—BRUSHES & CASE

MAW • LONDON & BARNET



'UCAL' HEALTH SALT

A CHEMISTS' LINE AT
COMPETITIVE PRICES.

PLENTIFUL WINDOW
DISPLAY MATERIAL

•• GIVE A SPARKLE ••

•• TO LIFE •• AND YOUR SALES ••

$7\frac{1}{2}$ D. Size

4/6 Doz.

6 doz. - 4/- doz.

Gross lots 3/9 „

1/- Size

8/- Doz.

3 doz. 7/6 „

For Sale by "Qualified Chemists" only.

UNITED CHEMISTS' ASSOCIATION, LTD.

Manufacturing Chemists,

CHELTENHAM, and 4 and 6 KEITH GROVE, LONDON, W.12.

Phone: Cheltenham 3021.

Phone, London: Shepherd's Bush, 3437/8.

FLYBAY-MIDGE-CREAM



**Fulfil entirely the demand for
an ANTI-STING in cream form.**

FLY B A Y has an advantage over liquid forms in its convenience in carrying and no risk in breaking. Being non-greasy it is cleanly in use.

**It not only REPELS INSECTS,
but RELIEVES STINGS. It is
APPROPRIATELY PERFUMED**

**FLYBAY can be RECOMMENDED
WITH EVERY CONFIDENCE**

**Packed in show boxes of six collapsible tubes
6/6 per dozen. 6 dozen 6/3.**

EVANS SONS LESCHER & WEBB L^T.^D
LIVERPOOL, LONDON AND
D U B L I N

**97%
PROFIT ON
OUTLAY**

New White VEET



SPECIAL SUMMER OFFER

On one order for NEW WHITE VEET received immediately we will give, in addition to usual $33\frac{1}{3}\%$ Trade Discount and 5% Cash Discount, a Bonus of 3 TUBES FREE to the dozen on ALL Sizes, i.e., 6d., 1/6 and 3/-

THIS OFFER MAY BE CLOSED ANY DATE WITHOUT NOTICE

EXAMPLE ORDER A.

	Trade.	Retail.
	£ s. d.	£ s. d.
2 doz. 6d. tubes	8 0	12 0
2 doz. 1/6d. tubes	1 4 0	1 16 0
1/3 doz. 3/- tubes	8 0	12 0
	2 0 0	3 0 0
Less 5% Cash Discount (For prompt settlement)	2 0	
FREE GOODS:	1 18 0	
6 x 6d. tubes		3 0
6 x 1/6d. tubes		9 0
1 x 3/- tube		3 0
		3 15 0
		1 18 0
YOUR PROFIT 97.37%		1 17 0

EXAMPLE ORDER B.

	Trade.	Retail.
	£ s. d.	£ s. d.
4 doz. 6d. tubes	16 0	24 0
4 doz. 1/6d. tubes	2 8 0	3 12 0
2/3 doz. 3/- tubes	16 0	24 0
	4 0 0	6 0 0
Less 5% Cash Discount (For prompt settlement)	4 0	
FREE GOODS:	3 16 0	
12 x 6d. tubes		6 0
12 x 1/6d. tubes		18 0
2 x 3/- tubes		6 0
		7 10 0
		3 16 0
YOUR PROFIT 97.37%		3 14 0

DISPLAY THIS BEAUTIFUL FREE CENTREPIECE for 21 Days and in return buy NEW WHITE VEET on the following terms: $33\frac{1}{3}\%$ Trade Discount, 5% Cash Discount. **THREE FREE TUBES** to the dozen.



ORDER FORM.

To Dae Health Laboratories, Ltd. Date.....
Please send:—

.....A ParcelsB Parcels
If neither of these parcels meet your needs, please write your Order below:

..... doz. 6d. Size New White Veet at 4/- dozen
..... „ 1/6 „ „ „ 12/- „
..... „ 3/- „ „ „ 24/- „

with BONUS OF THREE TUBES TO THE DOZEN and DISPLAY CARD which I will display in my window for 21 days.

MINIMUM ORDER THREE DOZEN, Carriage Paid.

Name

Address

.....
If goods are to be invoiced through Wholesaler, give name and address.

RAVON WARE

HAND DECORATED
ENGLISH
POTTERY

3'6 TO 7'6

CONTAINING

Piesse & Lubin's

EXCLUSIVE

BATH CRYSTALS
& POT-POURRI



EXCLUSIVE DESIGNS
PRODUCED IN OUR OWN
FACTORIES,

PIESSE & LUBIN LTD. INCORPORATING BAYLEY & CO.

LONDON OFFICES & SHOWROOMS, NORWICH HOUSE, SOUTHAMTON ST., HOLBORN WC2

RAVON PERFUMERY

A SELECTION
FROM THE

RAVON SERIES

GIFT SETS



WRITE FOR
ILLUSTRATED
CATALOGUE

1'6 TO 4'=-

CUSSONS, SONS & CO. LTD. KERSAL VALE, MANCHESTER

LONDON OFFICES & SHOWROOMS: NORWICH HOUSE, SOUTHAMPTON ST. HOLBORN W.C.2



FREE GIFT *of* **ONE HOUR**
 No more wasted time
 cleaning Medicals.
 Concentrate upon your
 dispensing with a carton of
 U.G.B. Washed and Sterilized Medicals
 at your elbow.

Not merely rinsed, as are many competitive makes of so-called "washed" bottles, but scientifically sterilized in boiling distilled water and dried in super-heated filtered air, then packed in dust-proof cartons. The U.G.B. Washed and Sterilized service means a saving of at least an hour a day for the busy dispenser.

*Supplied in both Cork
 Mouth and complete
 with White Enamelled
 Rustless Screw Caps.*

UNITED GLASS BOTTLE MANUFACTURERS • LIMITED

*The Largest Manufacturers of Glass Bottles
 in Europe*

**40/43 NORFOLK STREET
 STRAND, LONDON
 W.C.2**

*Telephone : Temple Bar 6680 (10 lines).
 Telegrams : "Unglaboman, Estrand, London."*

SANDALWOOD OIL

*Distilled from SANTALUM ALBUM. linn.
at the MYSORE GOVT. FACTORIES*



MINIMUM 90%
ACTUAL SANTALOL

For further information apply

TRADE COMMISSIONER
for MYSORE *in* LONDON
GRAND BUILDINGS
TRAFALGAR SQ, W.C.2

Telephone : Whitehall 8888

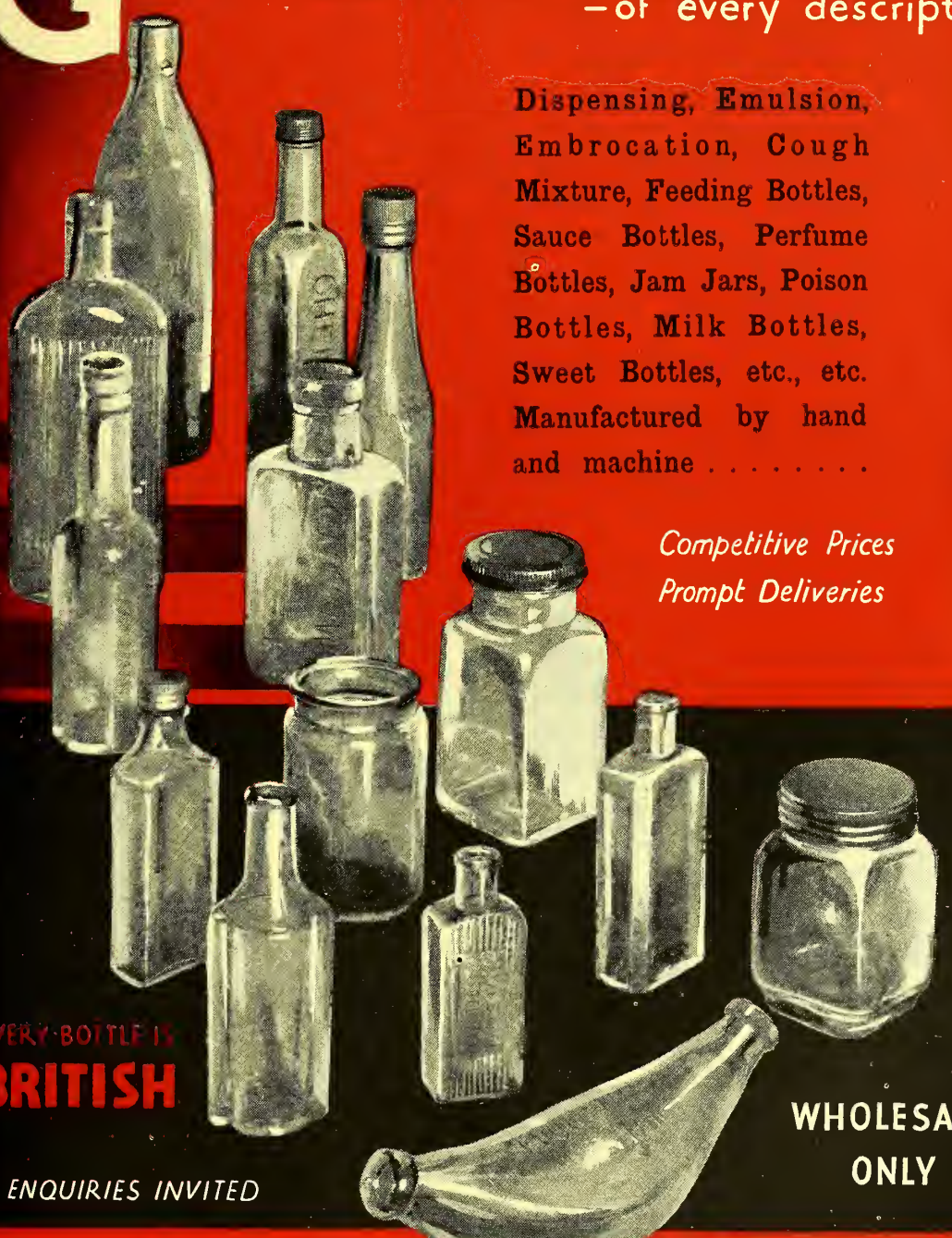
Code : Bentleys

Sole Agents for America : Messrs. W. J. Bush & Co., Inc., 370 Seventh Avenue, New York.

Sole Agents for Canada : Messrs. W. J. Bush & Co. (Canada), Ltd., 432 St. Helen St., Montreal.

GLASS BOTTLES

—of every description



Dispensing, Emulsion,
Embrocation, Cough
Mixture, Feeding Bottles,
Sauce Bottles, Perfume
Bottles, Jam Jars, Poison
Bottles, Milk Bottles,
Sweet Bottles, etc., etc.
Manufactured by hand
and machine

*Competitive Prices
Prompt Deliveries*

EVERY BOTTLE IS
BRITISH

ENQUIRIES INVITED

WHOLESALE
ONLY

LAX & SHAW Ltd

Regd. Office: ALBERT GLASS WKS., HUNSLET, Leeds

Telephone Leeds 21568-9 (2 lines)

Telegrams "Feeders, 'Phone, Leeds."

THREE FACTORIES—ALBERT, CLARENCE, DONISTHORPE

Sell 'SECTO'

*for the
destruction
of all
Insect Pests*

Secto has as its foundation a
Super Quality Powder and is
packed in hermetically sealed tins.
Always gives satisfaction.

For the House or Garden.
For Poultry Yard.
For Factories and Works.
For Ships, &c.

The CHEMIST'S Line.
Excellent Profits.
Forceful Showmatter.



	4d	6d
IN TINS	1/-	3/-
RETAIL	5/-	10/-

CUPAL LTD Blackburn

Telephone: Blackburn 6073

Telegrams: "Cupal, Blackburn"

Announcing — **ORALITE** DENTURE SOAP

A NEW ORAL CLEANSER

which

1. Cleanses, sterilises and sweetens all artificial dentures.
2. Whitens the natural teeth, removing all film and tartar.
3. Sweetens the breath and deodorises the entire oral cavity.
4. Kills all Disease Germs and sterilises the mouth.

ORALITE DENTURE SOAP was primarily introduced for cleansing and preserving the delicate tint of dentures made from

“ORALITE”

Regd.

THE WORLD'S FINEST DENTURE MATERIAL

ORALITE DENTURE SOAP is an excellent antiseptic and cleanser for natural teeth and its use has a definite tonic effect on the gums, without irritating the most delicate tissue; by its use the oral cavity is very efficiently sterilised and all bacterial growths eradicated.

Be Prepared —

Dentists all over the world are now using, and recommending their patients to use ORALITE DENTURE SOAP. Don't fail to take advantage of our

SPECIAL INTRODUCTORY OFFER

For 6/- cash with order we will send

8 tablets Oralite Denture Soap to retail at 10½d. each.

4 tablets in containers to sell at - - 1/3 each
and display matter.

These sell for 12/-, and cost 8/-, less bonus of 2/- for display, thus

YIELDING A CLEAR PROFIT OF 50%

This offer is only open for a short period.

THE ORALITE CO., LTD.
THORNTON, BLACKPOOL, ENG.

Telephone : Cleveleys 280.



Quinine

*Amsterdam Brand
Java Brand
Maarssen Brand*

**QUININE and QUININE SALTS.
QUININE ETHYL CARBONATE.
CINCHONINE, CINCHONIDINE,
QUINIDINE and their SALTS.**

Manufactured by

**AMSTERDAMSCH E CHININEFABRIEK, AMSTERDAM.
BANDOENGSCHE KININEFABRIEK, BANDOENG (JAVA).
NEDERLANDSCHE KININEFABRIEK, MAARSSEN.**

Exclusive Distributors for the United Kingdom:

R. W. GREEFF & Co. Ltd.

Thames House, Queen Street Place, London, E.C.4

Tel. No. CITY 6550 (8 lines).
Tel. Address "GREEFF CANNON LONDON."

And at

The Royal Exchange, Manchester.

Tel. No. BLACKFRIARS 9407/8.
Tel. Address "GREEFF MANCHESTER."

CINCHONA LEDGERIANA



"Rhodia" Brand

Société des Usines Chimiques Rhône-Poulenc

PARIS

PHARMACEUTICAL PRODUCTS

Adrenaline
Acid Salicylic (*Powder & Crystal*)
Amidopyrazoline (*Amidopyrin*)
Glycerophosphates
Guaiacol Carbonate
Guaiacol Crystals
Guaiacol Liquid
Lithium Carbonate and other Salts
Methyl Salicylate
Phenacetin (*Powder & Crystal*)

Piperazine and Salts.
Pyrazoline (*Phenazone*)
Pyrazoline Salicylate
(*Phenazone Salicylate*)
Resorcin
Rhodine (*Acid Acetyl-salicyl Powder, Crystal & Heavy Crystal*)
Salol
Sodium Salicylate (*Powder, Flake & [Needles]*)
Urethane

PHOTOGRAPHIC PRODUCTS

Hydroquinone
Paramidophenol Hydrochlor.
Rhodol (*Metol 100 per cent.*)
Sodium Hyposulphite
(*Prismatic Crystal*)
Sodium Sulphite (*Anhydrous*)

TECHNICAL PRODUCTS

Cellulose Acetate and Plastic Materials
Resorcin.
Pyrazolone Derivatives
Sodium Sulphite (*Anhydrous*)
Acetic Anhydride
Dimethylsulphate

O. Nitroanisol and O. Anisidine

VANILLIN

and SUPER VANILLIN

ENQUIRIES SOLICITED FOR SPOT OR FORWARD DELIVERY

R.W. Greeff & Co. Ltd.

HEAD OFFICE:
THAMES HOUSE
QUEEN ST. PLACE
LONDON E.C.4

TEL. No.: CITY 6550 (8 LINES)
TEL. ADD.: GREEFF, CANNON, LONDON



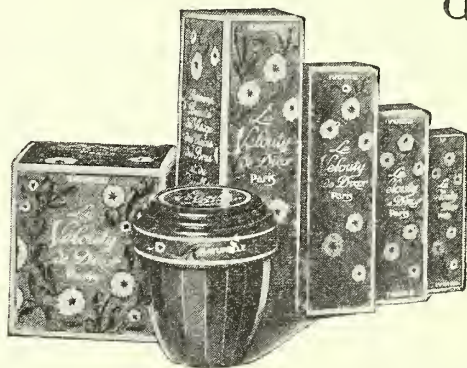
AND AT

536-7 ROYAL EXCHANGE
BUILDINGS, MANCHESTER

TEL. NO.: BLACKFRIARS 9407-8
TEL. ADD.: GREEFF, MANCHESTER

The original combined Cream and Powder

VELOUTY de DIXOR



The advertised line that you are asked for.

NOW ON P.A.T.A.

Samples free upon receipt of trade card or billhead.

PRICES :—No. 1. Handbag tube	3/- doz.	Retail -/4½
No. 2. Small tube	4/-	"/6
No. 3. Medium tube	7/-	"/1-
No. 4. Large tube	14/-	"/2-
No. 5. Super tube	22/-	"/3-
Pots (glass)	21/-	"/2/9
Pots de luxe (unbreakable)	36/-	"/4/6

Made in four shades:

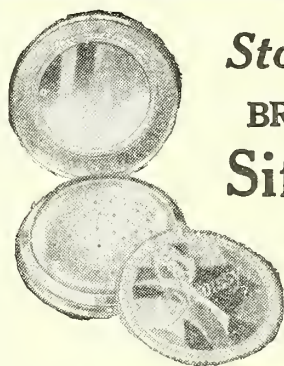
WHITE, IVORY, NATURAL and OCHRE.

Obtainable from your regular Wholesaler or direct from the Manufacturers:

DIXOR, LTD., 68, Newman St., Oxford St., London, W.1

Sole Distributors for

Northern Ireland: ROBERT MAYRS & CO., 43 Chichester Street, BELFAST
Irish Free State: MAY, ROBERTS & CO. LTD., Grand Canal Quay, DUBLIN



Stock & Sell BRITISH MADE Sifter Box

now made in
attractive colours

28/- per doz.

Retail 3/6 ea. P.A.T.A.

BATH POWDER CONTAINER

36/- per doz. Retail 4/6 each. P.A.T.A.

Ask for Illustrated List.

Chaussy
POWDER BOX

COMPANY, LIMITED,

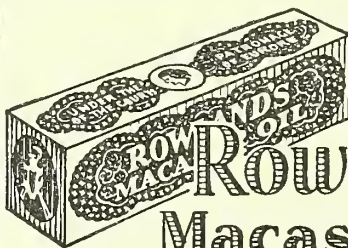
11, Bartlett's Buildings, Holborn Circus,
London, E.C.4.

SELLING SUGGESTIONS

Rowland's Macassar Oil
gives the hair lasting
beauty simply by making
it perfectly healthy.

*Stock and
recommend*

Of all
Wholesalers,
to retail at
3/6, 7/- and
10/6.



J. H. & Co.

**Rowland's
Macassar Oil**

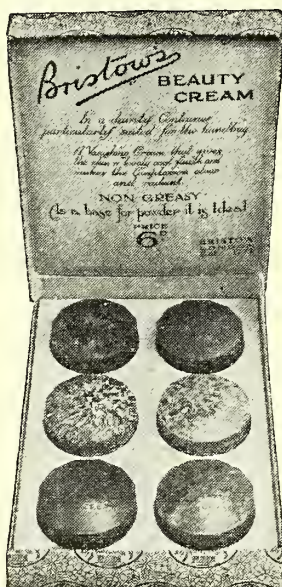
A. ROWLAND & SONS, LTD.
22 Laystall Street, Rosebery Avenue, London, E.C.1

A *Bristow* **"** **PRODUCT!**
AT A POPULAR PRICE

BEAUTY CREAM

in dainty "Bristolite"
 cases (quick thread caps)
 particularly suited for the
 handbag.

Available in
VANISHING CREAM
AND COLD CREAM



The attractive appearance
 of the artistically coloured
 moulded containers makes
 an **immediate** appeal to
 the woman of good taste,
 thus ensuring that the line
 will be

A
CERTAIN SELLER

A CHEMIST'S LINE

Retails at **6^D** and shows the
 usual Bristow margin of profit

Write for sample
 and full particulars

Bristow

THE CHEMIST'S HOUSE

SINCE 1777
COLINDALE, N. W. 9

For your supplies of

- Essential Oils
- Aromatic Chemicals
- Floral Ottos
- Soap Perfumes
- Oil Soluble Perfumes
- Deodorants
- Spraying Perfumes
- Emulsifiable Perfumes
- Emulsifiable Formalin
Perfumes
- Solid Perfumes
- Polish Perfumes

YOU

*Cannot do better than apply
to*

US

ESSENCES & SYNTHETICS

LIMITED

(Wm. C. SLATER, Managing Director)

4 Carlisle Avenue, London, E.C.3

Essynthet, Ald., London

Royal 0290.

Litto

PREPARATIONS BRING BIG PROFITS

LITTO Preparations do what is claimed for them. That is the secret of their popularity. They are made by a hair specialist of long and varied experience. His advice is always at your disposal.



PATCHOID for
Bald Patches

*Trade List upon
application*



LITTO Standard
for daily dressing

Obtainable
from all lead-
ing Wholesale
Houses, or
direct from :

THE LITTO LABORATORIES
29 Highbury Grove, N.5

**SOFT
SOAPS**

COCOANUT OIL
OLIVE OIL B.P.
SEED OIL & AMBER

**BASE OF LIQUID TOILET SOAP
BASE OF LIQUID SHAMPOOS**

W. M. DELF & CO.

Soap & Disinfectant Manufacturers
130-132 RICE LANE, LIVERPOOL

Delightfully fragrant and soothing

MIRABILE SUNBURN LOTION

The warm weather will sell it for you and the quality will bring repeats.

ANTISEPTIC and absolutely NON-INJURIOUS
however frequently applied.

Attractively packed in 4 oz. bottles at
8/9d. per doz.


A full size trial bottle free on application to
THE ABIETSAN MANUFACTURING Co., Ltd.
CONCORDIA WORKS, MANAGERS STREET, LONDON, E. 14.



**GREAT REDUCTION IN PRICE
OF**

YARDLEY LAVENDER

FROM JULY 4th, 1932

 Messrs. Yardley have pleasure in announcing that by an improved method of manufacture in which a blended spirit is used, they are enabled to offer their famous Lavender at a very considerable reduction in price.

To provide against loss to retailers which would ensue if old stock is sold at the new reduced price, we have arranged to take back old stock and replace it to full value with new stock at new prices.

Forms for replacement of stock will be sent on application.

Until July 4th next, present prices must be maintained.

Where stock has been bought through Wholesalers and no account has been opened with Messrs. Yardley & Company, returns of Lavender Water for replacement should be sent through the Wholesaler.

THE NEW PRICES ARE:

1/3 · 1/6 · 2/6 · 5/- · 7/6

Larger Sizes up to 2 Gns. Per Bottle

NO REDUCTION IN QUALITY — PRICE ONLY CHANGED

**It is most important that replacement
returns reach us before July 4th**



Frozoclone

REGD.

is the Original
Solid Eau de Cologne

BUY BRITISH

Large Size 3/6 P.A.T.A.

28/- per doz.

Small Size 2/- P.A.T.A.

Full Show Material on Request.

16/- per doz.

Solid English Lavender In Wedgwood Blue
Frosted Bottles.

Sizes and Prices as Frozoclone.



Carnate

The renowned NAIL POLISH PASTE
WATERPROOF & ANTISEPTIC

Retails at 1/9 P.A.T.A. per doz. 14/-

Also CARNATE Cuticle Remover

which Retails at 1/6 P.A.T.A. per doz. 12/-

Artistic Showcards available on application.

R. Demuth's Laboratories

68 Salusbury Rd.
& Montrose Avenue,
London, N.W.6

MIRADOS

Regd.

A new scientific preparation
which prevents and alleviates
the stings of mosquitoes
and other insects.

Rapidly absorbed into the skin and
does not soil or stain the clothes.

..

Artistic Cut-out Showcard
in colour to hold one bottle
available on application.

PRICE 1/3 P.A.T.A.

Wholesale 10/- per doz.

We are open to appoint
AGENTS in the
Colonies and Tropics.



Harmozaan

A coniferous preparation
possessing particularly power-
ful restorative properties, and
in its compressed form, enables
the effervescent Pine Baths of
the famous Continental Spas
to be reproduced in the home.

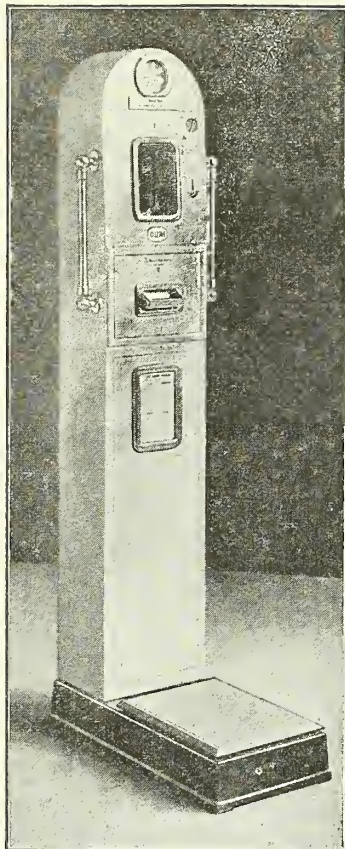
Retail 2/- & 3/9 P.A.T.A.

PER DOZEN 16/- & 30/-



R. Demuth's Laboratories

68 Salusbury Rd.
& Montrose Avenue,
London, N.W.6



INSTAL NOW.

OLLWI TICKET PERSONAL WEIGHER

Positively the lowest priced Ticket Weigher obtainable.

DO NOT MISS

writing to-day for further information with Pharmacy Advertisements.

COMPACT - ATTRACTIVE - SIMPLE

To Automatic Novelty & Development Agency, Ltd.,
87 Regent Street, London, W.1

Please send details of your "OLLWI" without any obligation

to me
us.

Name.....

Address.....

Agencies throughout Great Britain.

ODONTIC

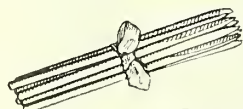
In
Counter
Display
Boxes



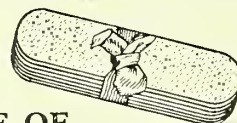
PLATE

From all Wholesalers
BRUSH

W. R. Speer & Son
215 Dalston Lane, London, E.8
EST. OVER 100 YEARS.



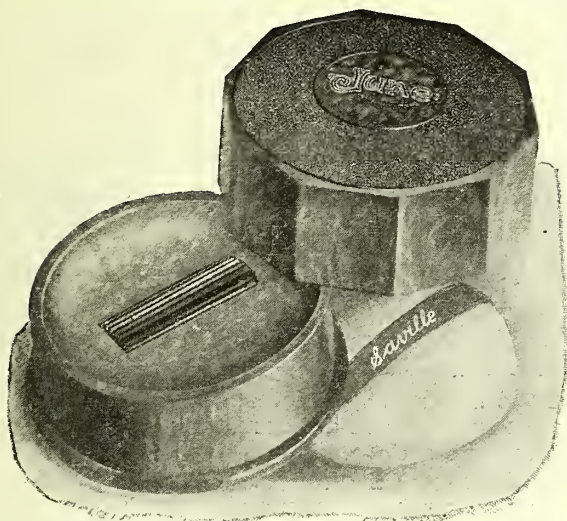
Best Quality Goods
BRITISH MANUFACTURE



SPECIALIST IN THE MANUFACTURE OF
ORANGE STICKS and EMERY BOARDS
BOXED, CARDED OR IN BULK AT COMPETITIVE PRICES

ROBERT LEE - 14 Calverley Grove - UPPER HOLLOWAY, N.19
Wholesale Houses only supplied

'Phone : Archway 2144



At last!

THE PERFECT POWDER CONTAINER

Saville's ingenious invention, the New Rola Non-Spill Box has been hailed everywhere as the

OUTSTANDING SUCCESS OF THE SEASON

The extreme simplicity, economy and convenience of this attractive powder container have combined to make it the most talked-of and admired feature of modern perfumery.

The Rola Box CANNOT spill, leak or waste

To obtain sufficient powder for each application

SIMPLY DRAW THE PUFF ACROSS THE ROLLER

Saville's
June Beauty Powder

IN THE NEW

ROLA NON-SPILL BOX

RETAIL 1/3 PER DOZ. 10/-

Order direct or through your usual wholesaler.

SAVILLE PERFUMERY LIMITED, WATFORD, HERTS.



Small size 9/- per doz.

(Retail at 1/3 ea.)

Large size 12/6 per doz.

(Retail at 1/9 ea.)

Your customers will
ask for

NUFIX

The better Dressing for the Hair
NO HARDNESS · NO DEPOSIT

Does not soil headwear or linen, and is guaranteed not to contain gum.

Eliminates dandruff.

Nationally advertised. Gives a handsome profit. Showcards and posters, etc., supplied. Display the unique screw top bottles, and benefit by the increasing demand.

Special terms for window displays.

Of your Wholesaler or the Manufacturers:

WALDEN, WALDEN & CO.
15 Grape Street, London, W.C.

Distributors for Scotland:

S. GOLDBERG & CO., 45 Union Street, Glasgow, G.2.

Mercolized Wax

for the Complexion

Extensively Advertised. Always in Demand.

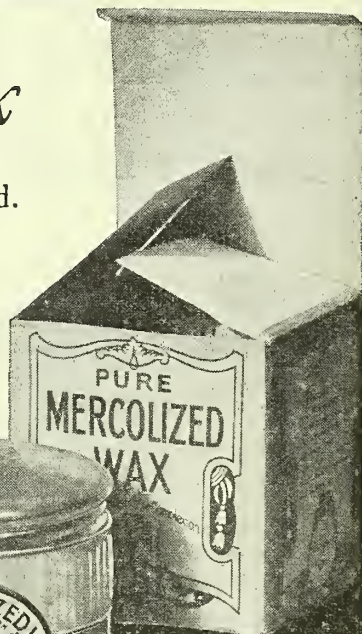
*There is no risk in holding full stocks.
Every woman is a potential buyer.
Sales are regular and repeats certain.*

Stallax

*a Shampoo—also popular,
and shows a handsome profit.*

Dearborn
(1923) Limited

37 Gray's Inn Rd. London, W.C.1



Telephone,
Holborn, 9669

POTTER & MOORE

**COMMENCING
JULY 4th**

ANNOUNCE Tremendous Reductions in Retail Prices



Estd. 1749

ANNOUNCEMENT

**POTTER & MOORE'S
MITCHAM LAVENDER**

REDUCTION IN PRICES

QUALITY UNCHANGED

Ask for a TRIAL without obligation

OLD PRICES	NEW PRICES
14/6	6/6
8/6	4/6
4/6	2/6
2/6	1/6
1/6	1/-
1/-	6½d.

**THE ORIGINAL AND BEST
NOW FREE FROM SOLVENT DUTY**

The large space advertisements which will appear continuously in the "Daily Mail," "Daily Mirror," "Daily Sketch," "Sunday Pictorial," "Empire News," etc., etc., will create a sudden enormous demand.

The Public are being invited to test this incomparable perfume for themselves **FREE AT YOUR SHOP.** "Roll in on this tide of Big Business" by sending in your order to-day

A counter card (as illustrated) together with testing bottle for customers given **FREE WITH EVERY ORDER**

IMPORTANT

All direct customers will have received by post particulars of our scheme to exchange present stocks of our Mitcham Lavender by debit and credit. **Closing date July 16th.**

(The alteration of price does not apply to the Irish Free State).

POTTER & MOORE LTD.

The House of Quality since 1749

LAVENDER HOUSE, TYSSEN STREET, DALSTON, LONDON, E.8

**YOUR ENQUIRIES
AND CO-OPERATION
WILL BE WELCOME**

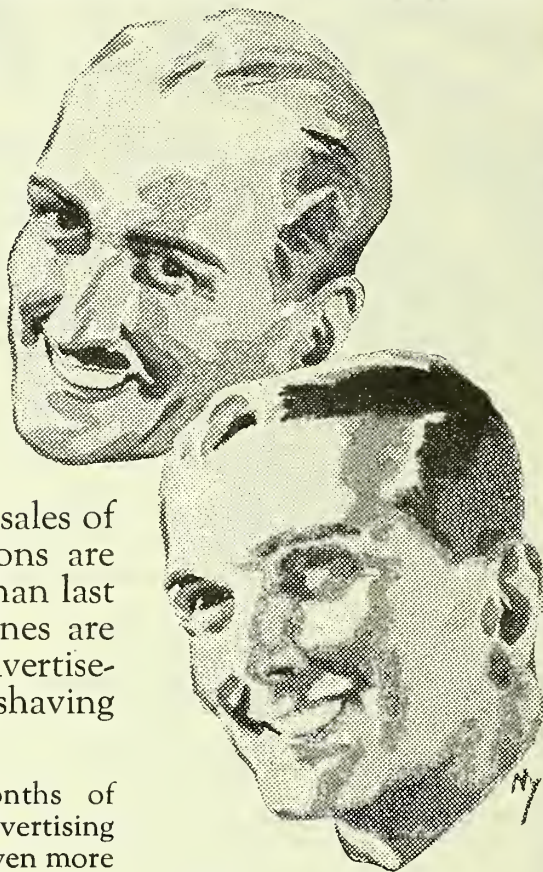
More Men are buying Williams

"Made in England"

Despite the depression, the sales of Williams Shaving Preparations are already over 100,000 more than last year. These British made lines are backed by the largest advertisements appearing for any shaving preparation.

Right through the coming months of returning prosperity Williams advertising will be working for you, making even more regular users of these profitable lines.

In times like these it is the steady stream of sales which pays you best—see that your Williams turnover and generous Williams profits keep pace with the growing demand. Carry ample stocks—show Williams in your window and on your counter—write to-day for our latest sales-compelling display pieces.



Williams Shaving Preparations

MARBELITE STICK SHAVING CREAM AQUA VELVA TALCUM POWDERS

Sole Distributors—Scott & Bowne, Ltd.

(in Great Britain and Ireland)

10 Stonecutter Street, London, E.C.4



THE FAMOUS TRADE MARK OF A FAMOUS PRODUCT

SCOTT & BOWNE LTD.
Manufacturing
Chemists,
Stonecutter
Street,
LONDON, E.C.4

BISMUTH DYSPEPSIA TABLETS
(MEGGESON)
BISMUTH CARB. Gr. 1
SODA BICARB. Gr. 3
SP. CHLOROP. AA QS
DL. LAVAND.
For INDIGESTION and FLATULENCY

Glycerine & Black Currant Pastilles
MEGGESON & CO LTD LONDON.
ESTABLISHED OVER 100 YEARS.

VISTIC
for DENTAL PLATES
MAKES THEM FIT COMFORTABLY & SECURELY IN THE MOUTH & KEEPS THEM IN POSITION Perfectly harmless Manufactured by MEGGESON & CO LTD LONDON

SORE THROAT LOZENGES
Containing CHLORATE OF POTASH, BENZOATE & BICARBONATE OF SODA & MENTHOL & BLACK CURRANT One to be slowly dissolved in the mouth every two or three hours when required MEGGESON & CO LTD LONDON.

BISMUTH DYSPEPSIA TABLETS
(MEGGESON)
BISMUTH CARB. Gr. 1
SODA BICARB. Gr. 3
SP. CHLOROP. AA QS
DL. LAVAND.
For INDIGESTION and FLATULENCY

Glycerine & Black Currant Pastilles
MEGGESON & CO LTD LONDON.
ESTABLISHED OVER 100 YEARS.

VISTIC
for DENTAL PLATES
MAKES THEM FIT COMFORTABLY & SECURELY IN THE MOUTH & KEEPS THEM IN POSITION Perfectly harmless Manufactured by MEGGESON & CO LTD LONDON

SORE THROAT LOZENGES
Containing CHLORATE OF POTASH, BENZOATE & BICARBONATE OF SODA & MENTHOL & BLACK CURRANT One to be slowly dissolved in the mouth every two or three hours when required MEGGESON & CO LTD LONDON.

BISMUTH DYSPEPSIA TABLETS
(MEGGESON)
BISMUTH CARB. Gr. 1
SODA BICARB. Gr. 3
SP. CHLOROP. AA QS
DL. LAVAND.
For INDIGESTION and FLATULENCY

Glycerine & Black Currant Pastilles
MEGGESON & CO LTD LONDON.
ESTABLISHED OVER 100 YEARS.

VISTIC
for DENTAL PLATES
MAKES THEM FIT COMFORTABLY & SECURELY IN THE MOUTH & KEEPS THEM IN POSITION Perfectly harmless Manufactured by MEGGESON & CO LTD LONDON

SORE THROAT LOZENGES
Containing CHLORATE OF POTASH, BENZOATE & BICARBONATE OF SODA & MENTHOL & BLACK CURRANT One to be slowly dissolved in the mouth every two or three hours when required MEGGESON & CO LTD LONDON.

BISMUTH DYSPEPSIA TABLETS
(MEGGESON)
BISMUTH CARB. Gr. 1
SODA BICARB. Gr. 3
SP. CHLOROP. AA QS
DL. LAVAND.
For INDIGESTION and FLATULENCY

Glycerine & Black Currant Pastilles
MEGGESON & CO LTD LONDON.
ESTABLISHED OVER 100 YEARS.

VISTIC
for DENTAL PLATES
MAKES THEM FIT COMFORTABLY & SECURELY IN THE MOUTH & KEEPS THEM IN POSITION Perfectly harmless Manufactured by MEGGESON & CO LTD LONDON

SORE THROAT LOZENGES
Containing CHLORATE OF POTASH, BENZOATE & BICARBONATE OF SODA & MENTHOL & BLACK CURRANT One to be slowly dissolved in the mouth every two or three hours when required MEGGESON & CO LTD LONDON.

BISMUTH DYSPEPSIA TABLETS
(MEGGESON)
BISMUTH CARB. Gr. 1
SODA BICARB. Gr. 3
SP. CHLOROP. AA QS
DL. LAVAND.
For INDIGESTION and FLATULENCY

Glycerine & Black Currant Pastilles
MEGGESON & CO LTD LONDON.
ESTABLISHED OVER 100 YEARS.

VISTIC
for DENTAL PLATES
MAKES THEM FIT COMFORTABLY & SECURELY IN THE MOUTH & KEEPS THEM IN POSITION Perfectly harmless Manufactured by MEGGESON & CO LTD LONDON

SORE THROAT LOZENGES
Containing CHLORATE OF POTASH, BENZOATE & BICARBONATE OF SODA & MENTHOL & BLACK CURRANT One to be slowly dissolved in the mouth every two or three hours when required MEGGESON & CO LTD LONDON.



A talk in the Park over 130 years ago

On this day in 1796, in the reign of King George the Third, there was an animated conversation in the Park. The talkers were unitedly interested by news of the creation of



a new firm in the City of London by name Meggeson, who had begun making Medicated Lozenges for the quick curing of Coughs, Colds, Sore Throats and all Bronchial affections. The conversation led to the opinion that in this palatable and portable form Lozenges would supersede the hitherto nauseous medicines.

Since that talk took place immense strides have been made, and to-day Meggeson's Medicated Lozenges and Pastilles are sold all over the world, and through all this space of time constant improvements in manufacture have been achieved. Quality, however, has always been the keynote, and it is on Quality that the firm has made its world-wide repute.

Experience DOES count.

MEGGESON & CO. LTD.

BERMONDSEY, LONDON, S.E.16.

Telephone: BERMONDSEY 1741, 1742. (Private Branch Exchange).

Jaytee's
HUILE d'OLIVE

FINEST QUALITY GUARANTEED PURE



SPECIALLY
FOR MEDICINAL USE ALSO SALADS Etc.
PREPARED

BRITISH
PHARMACEUTICAL
SPECIALITIES
manufactured by



John Thompson (WHOLESALE DRUGGISTS 1921) **Ltd.,**

Manufacturing Chemists

27-35, Duke St., Liverpool

British BROMIDES AND IODIDES

ATROPINE BROMIDES
CAMPHOR CAFFEINE
EMETINE EXTRACTS
GELOZONE NICOTINE
IODIDES SALICIN
STRYCHNINE VERMILION
QUININE PRUNELLAS
ESSENTIAL OILS MERCURIALS
DRUG GRINDING

PURITY COMBINED WITH PERFECT APPEARANCE

Whiffen & SONS LTD

Incorporating Geo. Atkinson & Co. Estab. 1654

BATTERSEA S.W.1 FULHAM S.W.6

RASPBERRY VINEGAR

[ARNFIELD]

Sample
for
Testing
on
Request

Prepared from pure Raspberry fruit juice and pure cane sugar.

Free from preservatives and artificial flavourings.

Guaranteed to meet the requirements of the Food & Drug Acts and the Pure Food regulations.

Will not deposit nor ferment. Supplied in casks, carboys and demijohns.

Special terms for contracts, delivery as required.

J. C. ARNFIELD & Sons

Wholesale & Export Druggists

Gadsby Works Princes Street

Ltd.

Stockport

Est.
1
7
8
6

L I N E S O F S A T I S F A C T I O N



AMMONIA

Double Strength; Household Strength; Bath
IN DISTINCTIVE BOTTLES & CARTONS

Samaritan Brand

OLIVE OIL

absolute purity, finest flavour

MEDICINAL PARAFFIN

"ZOFLORA"

Perfume Disinfectant

"SINFECT" Germicide

"KEWTIK"

Hand Cleanser

&c., &c.

Chemists will find all these lines profitable to handle. They are attractively packed and artistic showcards are available.

Write for Price List.

THORNTON & ROSS LTD.

MANUFACTURING CHEMISTS, MILNSBRIDGE, HUDDERSFIELD

*You cannot buy better
than the Best!*

The Malt that cannot Crystallise



JEFFREYS, MILLER & Co. Ltd.

Telephone: WIGAN 327



Leyland Mills, Wigan

Telegrams: "MALTUM" WIGAN

Wholesale &
Bulk enquiries
invited.
Samples on
request.

P O M O N A

BRITAIN'S NEWEST TOILET SOAPS

The outstanding exhibit at the Chemists' Exhibition. Write for list and particulars of Bonus terms extended to June 30th, also details of FREE tablets for your customers of Posy, the New 4d. wrapped Soap. **¶ A UNIQUE OFFER.**

All Pomona Soaps show a generous profit; are original in design and style, and made in England.



POSY TOILET SOAP
Packed in 1 doz. wrapper outer
and 3 tab. boxes.



CAMPHOR SOAP
Incorporating lavender
and eucalyptus.



SILVER-DAWN TOILET SOAP
The all-white Series of un-
wrapped Soaps in 8 separate
Perfumes.



STOCKS HELD BY
MAY, ROBERTS & CO.,
LONDON, E.C.



Actual Boilers of the best soap.

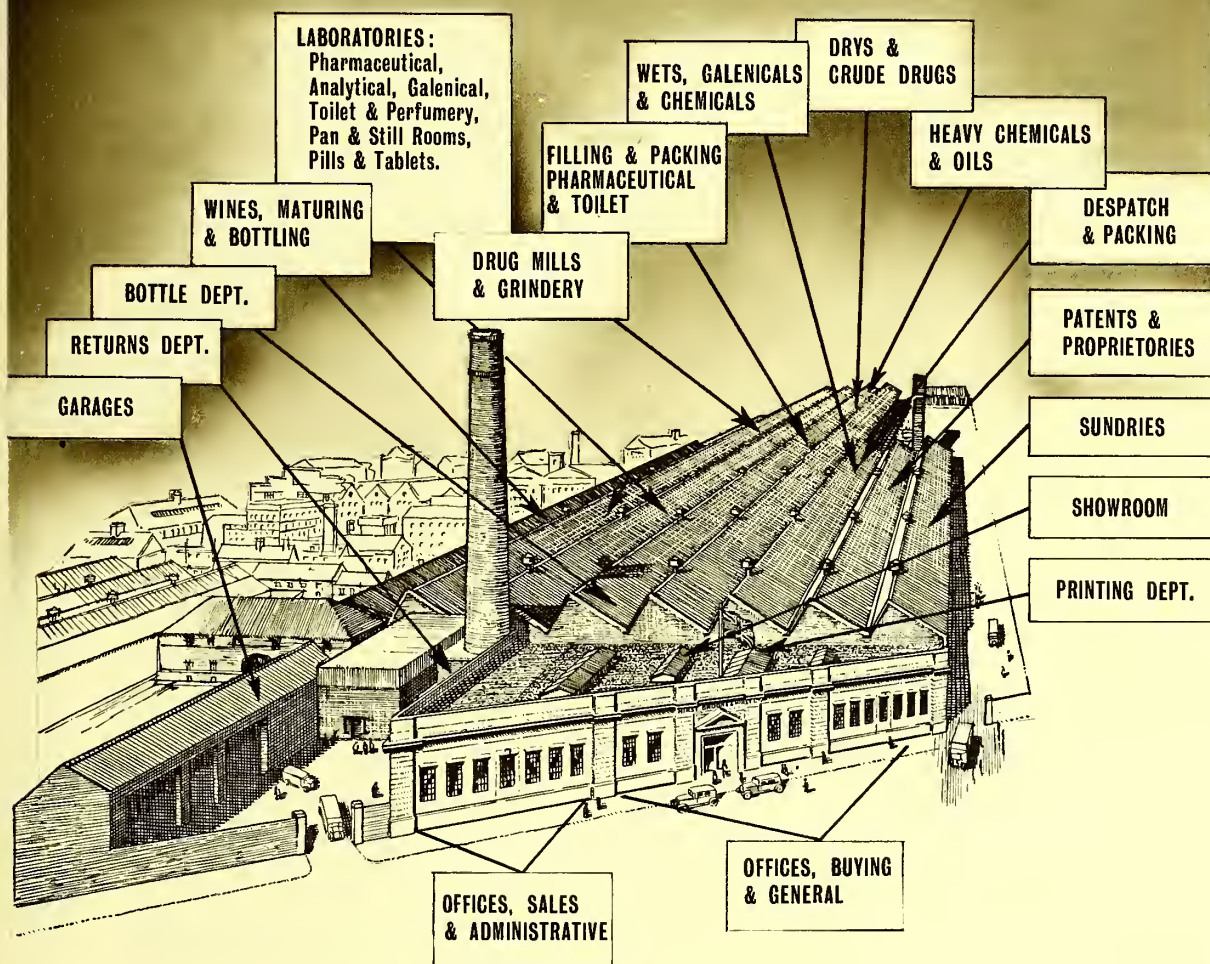
POMONA SOAP CO. Ltd., 194, Gt. Portland St., LONDON, W.

Independent Makers of Fine Soaps for over 60 years.

General Manager, Martin J. Rosekilly.

OUR NEW WORKS

Now open for your inspection



Write for invitation to visit

HIRST BROOKE & HIRST LTD.

SHEEPSCAR WORKS, LEEDS

Phone 20374 (4 lines)

ESTABLISHED 1821

Telegrams "Hirst, Leeds."



A HAND OF TRUMPS

ARTISTIC
TOILET BOTTLES
BRITISH MADE

Write for illustrated list of bottles and caps.

INTERNATIONAL BOTTLE CO. LTD.

'Phones : MET 6161.
(4 lines.)

48 FORE STREET, LONDON, E.C.2.

Grams : AUTREFOIS,
London.

Increase your *Energen* Trade

THE
NO SUGAR
FRUIT
PRODUCT

DELICIOUS



THE
NO SUGAR
FRUIT
PRODUCT

DELICIOUS

Show it on your counter
and meet the needs
of those Diabetic
and Obesity Diets

Energen
MARMALADE

is eaten with

Energen
BREAD

ENERGEN FOODS CO. LTD.
ENERGEN WORKS,
BRIDGE ROAD,
WILLESSEN, N.W.10.

Telephone :—



Willesden 3771

Retails at
2/3-1lb.jar
full weight



An entirely new
Elastic Hosiery

"SERVIT" Seamless Elastic Hosiery is a new which enables it to to annoy modern Close!

AYRTON, SAUNDERS & CO. LTD. LIVERPOOL
ORDER

SERVIT
ELASTIC
HOSIERY

Name _____

Please state length (in inches) _____

PAIR or SINGLE _____

SEAMLESS or ORDINARY _____

Colour	Quality	Colour

REMARKS _____

Post. Specials within Three Days.

This PAPIER MACHE

Display Leg

with GILT STAND,
SHOWCARD and
MEASUREMENT
ORDER BOOK

Supplied FREE with
INTRODUCTORY
PARCEL

THIS BOTTLE
(Ayrton's Provisional Patent)
is built up in
THREE INTEGRAL
LAYERS

- *Exterior—Steam cured Para Rubber.
- *Middle — Finest woven Cotton Fabric.
- *Interior—A Newly discovered rubber Composition which is impervious to steam and water and adds years to the life of the bottle and makes it

Free o' all Risk
Takes the Shivers
From the Sheets

Free o' Risk

Steamproof-lined

HOT WATER BOTTLE

(AYRTON'S PATENT)

PRICES

	10 x 8	12 x 8	12 x 10
GREY	4/6	5/-	5/9
RED	5/-	5/9	6/6

SIZES IN ST

AYRTON
SAUNDERS
& Co. Ltd.
Telegrams
"Sundries"
LIVERPOOL
Telephone
Royal 4861

LIVERPOOL
ENGLAND



It is easy
to do the
Elastic Hosiery
trade with
Ayrton's
Sales-helps

HIBISCUS HAIR CREAM



With Oil

Non Oily

AYRTON'S of LIVERPOOL



WRITE FOR
PRICE LISTS
AND QUOTATIONS



SAVES

LIFE

The
VITAMIN
ARATION
INITIAL FOR
HALTH OF
CHILD

CREAM EMULSION
OF
COD LIVER
WITH HYPOPHOSPHITE
OF LIME AND
BUILDS THE BODY AS



LOVED BY CHILDREN
BECAUSE OF ITS
"FLAVOUR"
BODY
BRAIN

A BLOOD
ENRICHER

SKIN
ERUPTIONS

AT CHANGE
OF SEASONS

A TONIC

SKIN
ERUPTIONS

**SULPHUR
AND
YEAST
TABLETS**

The
New
Spring Tonic
Medicine



Not a "pain" left!

P.K.L.

PAIN KILLING LINIMENT

MADE IN

Give New Character to your drug display



Not always have bulk drugs been packed suitably for attractive display, but now we are offering a wide range of popular 'bread and butter' lines — both liquid and dry preparations—in the striking guise you see in the above illustration.

Dignity, modernity, confidence, quality are all suggested by this pack, which we believe to be among the finest offered in the drug trade, and the pack is available now for all the popular preparations listed at the side.

ALL THESE ARE AVAILABLE IN THE NEW PACK

AMMON. TINCT. QUININ

SODA BICARBONATE

BORACIC CRYSTALS

BORACIC POWDER

BORAX

CAMPHOR

CAMPHORATED OIL

CASTOR OIL

CHAMOMILE FLOWERS

COD LIVER OIL

COMP. LIQUORICE POWD

COMPOSITION ESSENCE

EPSOM SALTS

EUCALYPTUS OIL

EXT. CASCARA SAGRADA

FLOWERS OF SULPHUR

FRIARS BALSAM

GLAUBER SALTS

GLYCERINE

GLYCERINE THYMOL

LINSEED

LIQUORICE JUICE

OLIVE OIL

PARAFFIN LIQ. (Med.)

PARRISH'S CHEM. FOOD

SENNA LEAVES

SENNA PODS

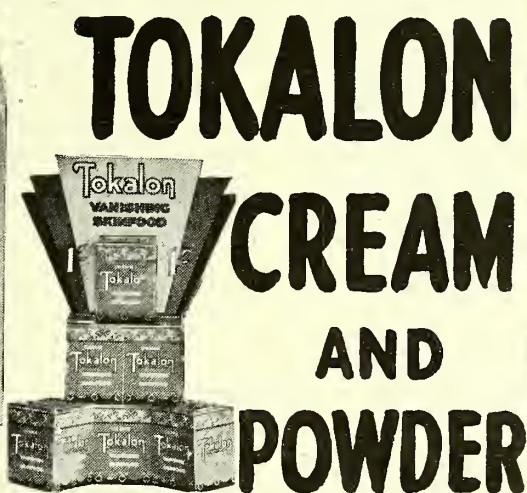
TINCT. OF IODINE

GOODALL, BACKHOUSE & Co. LEEDS

10% Discount for Window Display



In full colour. This new display makes striking effect in any window.



**New Display
Now Ready
is bound
to increase
YOUR
SALES**

Enormous sums are spent every month on Advertising Tokalon Products. Every dealer is offered attractive and forceful display material to link up with the press publicity and attract the new business created by the wide advertising.

Mail the Coupon below to get the attractive material here illustrated.

10% Discount is allowed on all individual orders of £2 (net) and over to dealers signing the Agreement for Window Displays. If you are not receiving this, mark it on the Coupon and particulars will be sent you.

**Cut out and
Post this
Coupon Today**



TOKALON LTD.

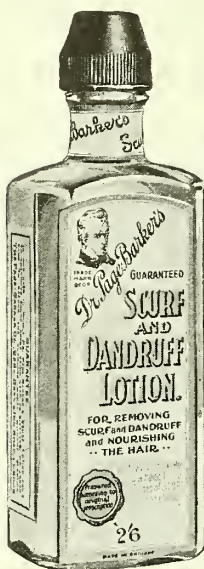
Chase Road, London, N.W.10

Please send :

- (a) Set new Creme Tokalon Display Material.
- (b) Copy of Window Display Agreement offering extra discounts.

Name

Address



Dr. Page-Barker's 2/6 SCURF & DANDRUFF LOTION

The Guaranteed Specific for SCURF

Dr. PAGE-BARKER'S LOTION is known throughout the Trade as the one reliable specific for Scurf and Dandruff—which can be absolutely depended on and which can therefore be sold with every confidence. No matter how bad the case may be, **Page-Barker's will not fail.** A **cast-iron guarantee** with every bottle—that it will eradicate Scurf or the purchase price will be refunded without question. Shows you 80 per cent. profit on outlay.

PER **18/-** DOZEN

*Note the Improved
Screw Cap!*

With every order for 3 dozen you get three
2/6 bottles as bonus and attractive showcards

SHOWCARDS WITH EVERY ORDER. WRITE FOR EXPORT TERMS.

THOS. CHRISTY & CO., 4-12 OLD SWAN LANE, LONDON, E.C.4

“VAREEN” LIQUID NAIL POLISH

FAVOURITE COLOURS:
NATURAL ROSE
PALE CORAL
DEEP ROSE WHITE
BRILLIANT ROSE
Etc.



NAIL POLISH

1/- size	..	..	..	7/6 doz.
1/6 ..	..	..	..	10/6 ..
2/6 ..	..	..	..	16/0 ..

POLISH REMOVER

1/- size	..	..	..	7/6 doz.
1/6 ..	..	..	..	10/6 ..

CUTICLE CREAM

1/- size	..	..	..	7/6 doz.
1/6 ..	..	..	..	10/6 ..

VAREEN LTD.

82a PORTOBELLO RD., LONDON, W.11

Telephone No. : PARK 9951

TAYLOR'S CIMOLITE TOILET POWDER THE PERFECT POWDER FOR NURSERY USE



A perfectly bland and non-irritating Powder, Invaluable in all cases of Eruptions, Chafing, Roughness of the Skin, etc. Recommended by eminent skin doctors and recognised as the leading Toilet Powder for over 70 years by the nursing profession. Used in the Royal Households.

In deference to the many requests received from users of "CIMOLITE," a sprinkler tin to retail at 1/1½ is now available. This new packing is in addition to the familiar 1/1½ packet which is still on the market.

When ordering please specify TINS or PACKETS.

"CIMOLITE," in all sizes, also CIMOLITE SOAP AND CREAM, is stocked by all Wholesale Chemists and Druggists.

TERMS and ILLUSTRATED PRICE LISTS, also ATTRACTIVE SHOWCARDS, Counter Bills and other selling literature, obtainable from

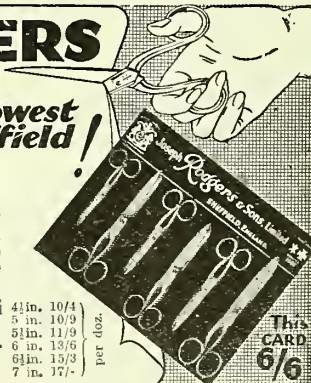
JOHN TAYLOR, 30 Baker Street, Portman Square, LONDON, W.1.

RODGERS QUALITY —and the lowest price in Sheffield!

Rodgers Scissors have always sold on quality, *now they sell on price as well.* The card illustrated costs you 6/6 and the scissors sell at prices ranging from 1/4 to 2/3, showing you a net profit of 3/3 per card. Buy British and help to reduce unemployment and taxation.

Order Card No. E 7174/C.D., and see how the scissors sell themselves.

Joseph Rodgers & Sons, Ltd.
Cutlery to His Majesty,
SHEFFIELD.



Silk's One Drop Perfume TRUE TO THE FLOWER



VERY handy for a lady's bag, convenient to use.

Sells at sight if shown on counter. Good profit, satisfied customers and repeat orders. This specimen is of a fourteen-coloured very beautiful showcard in a convenient size, 6 in. by 9 in., which helps the sale.

Order now.

1/6 size 12/- per doz.

2/6 size 18/- per doz.

YOU NEED PROFIT.

Your Customers' Hair needs

SILKODONO

There is no preparation on the market to beat SILKODONO for Dandruff, Scalp Irritation, Falling Hair: SILKODONO greatly encourages the growth of the Hair, and as for Easy Setting and Beautifying the Wave, you need only try it and you will never use anything else. The profit on SILKODONO is

80%

PRICES AND BONUS:
SILKODONO,

1/6 size 12/- per doz. (14 to the doz.)

2/6 " 20/- " " "

4/6 " 36/- " " "



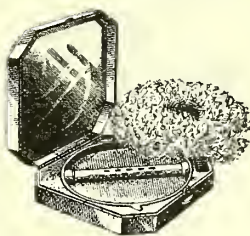
Get them through your usual Wholesale House, with Bonus, or Direct from 'Phone: CHANCERY 8995.

SILK'S TOILET Co., 8/9 Red Lion St., High Holborn, London, W.C.1

PLASSARD SIFTER BOX

for loose POWDER

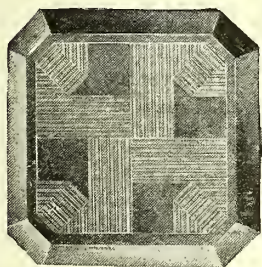
With and without ROUGE. The Very LATEST and BEST SURPASSES ALL OTHERS.



POINTS OF SUPERIORITY:—

Swansdown Puff, Rouge Sieve Pad, Unbreakable Mirror—Simple watch movement—The POWDER is easily refilled by lifting up the centre tray—No Powder can possibly be spilt—No waste—The Powder sifts in the centre only.

IF YOU HAVE NOT ALREADY ORDERED
DO SO IMMEDIATELY.



SINGLE
BOX

RETAIL
6/6 each

Wholesale
54/- doz.

DOUBLE
BOX

with Rouge
RETAIL
8/6 each

Wholesale
72/- doz.

Also in various beautiful
coloured enamel designs

RETAIL Wholesale
10/6 each 84/- doz.

Better
and more
Satisfactory
Preparations
if you use
Famous



PREEMO PERFUME ESSENCES

for making up

Toilet Preparations, Perfumes, etc.

PREEMO ESSENCES impart to all Toilet Preparations in which they are used a delightful charm and fragrance quite of their own. Your customers will be delighted with them and will return again and again for "another bottle like the last." They are highly concentrated, and, therefore, very economical, and being ready for immediate use they require no filtering, mixing or blending beforehand. Used by the leading chemists throughout the world.

THE PREEMO CO., 63 High Holborn, W.C.1

Have you got your **TAKY** stock yet?

TAKY CREME and LIQUID DEPILATORY

OUR organisation is being strained to its utmost to meet the enquiries of consumers all over the country. Continuous advertising will be in full force from July 1st. Twenty women's journals and four national newspapers are included in the appropriation. Get your share of the demand by stocking Taky now. Your wholesaler can supply you or send direct to the manufacturers.

CREME TAKY

Retails 6d. Trade 4/- dozen
Retails 1/3. Trade 10/- dozen
Retails 1/9. Trade 14/- dozen

LIQUID TAKY

Retails 2/6. Trade 20/- dozen

*Manufactured and distributed in
England, by the*

CHAS. ROGER LABORATORIES, LTD.
15 Great James Street, London, W.C.1

Telephone: Holborn 9971



Distributed in Scotland
and Northern Ireland by
Easton Milligan & Co., Ltd.
5 St. Peter's Lane,
Blythswood, Glasgow

Distributed in Wales by
J. R. Buckley & Co.
61 Merchant's Exchange,
Cardiff

BUTYWAVE
SHAMPOO

6^D
EACH

YOU REALLY MUST TRY THIS - IT'S WONDERFUL

**Yes—advertised
month in and
month out——
and it shows you
83% PROFIT**

**THE BUTYWAVE CO. (Dept. O.27), 5 Rampayne Street
Vauxhall Bridge Road, London, S.W.1.**

**THE
WARDONIA**

**"NEW EDGE"
RAZOR!**

Patent No.
296,597.

Every Razor
and Blade
Guaranteed.

**A shaving miracle with
enormous sales! Send
now for trade terms for
the Wardonia "New
Edge" Razor and Blades.
Both scientifically right
lines at a generous
profit.**

Sole Makers:
Thomas Ward & Sons, Ltd.,
Wardonia Works,
Sheffield - - England

G. B. KENT & SONS, LTD.

Are known the World over as
the Largest Manufacturers of

**BEST
BRITISH
RUSHES**

Please write for full Particulars to:
75 FARRINGTON ROAD, E.C.1

CALDERON SAYS—

*“ . . . in the sky reigns the sun,
over the nocturnal lights—the evening star,
among the precious stones—the diamond,
and, in the kingdom of perfumes, the Rose reigns
by the force of its beauty.”*

OTTO OF ROSE BULGARIAN UNION GÉNÉRALE BRAND

Represents Unrivalled Perfume Value

PRODUCED IN THE DISTILLERIES OF THE
UNION GÉNÉRALE DES COOPÉRATIVES BULGARES
SOFIA

PURITY GUARANTEED BY THE
AGRICULTURAL BANK AND THE BULGARIAN GOVERNMENT

DISTILLERIES

RACHMANLARI, SLATINA-TEKIA, KARASSARLII, DERELII, YGANOVO, SOPOT,
KARLOVO, GORNOOMARBAS, MRATCHNIK, ADJAR, RACHMANLII, KAZANKA
TCHECHLARI, STRELTCHA, ROOVO, RAJANA GORNOTCHERKOVO, PAVEL
TOURIA, GABAREVO, GOLEMOSELO, KALOFR.

Sole Selling Agents for the British Empire—

W. J. BUSH & Co. LTD.
ASH GROVE, HACKNEY, LONDON, E.8

THE DUAL

Personal Weighing Machine

The SECRET WEIGHER



SOME of the fair sex are as secretive about their weight as they are about their age. The revolving chart on this attractive little machine permits weight recording in secret.

THE DUAL can be fitted with Telescopic Height Measuring Stick for use in Pharmacies and Schools.

AUTOWAY COMPANY
13 Wellington Street
GLASGOW

AGENCIES :
51 Farringdon Road, LONDON, E.C.1
Liverpool, Manchester, Birmingham, Nottingham, &c.

SHAVING BRUSHES

BE SURE

THE SIGN OF THE S.B. OF

QUALITY & VALUE

THERE'S ALWAYS A BRUSH IN THE — S.B. — RANGE TO SUIT YOUR CUSTOMER

ENSURE

SATISFACTION & SERVICE
AFETY
HAVING

BRUSH

BRITAIN'S BEST

SEND YOUR ENQUIRIES TO :—
SHAVING BRUSHES LTD.,
ALBION STREET WORKS,
BIRMINGHAM

BRITISH OCEAN BLADES
show you 125 % PROFIT!

8/-
PER
GROSS
EASILY
BEST!

TWELVE
for 1/6
POST FREE
3-HOLE PATTERN



Scientifically made of first quality Steel, in our own British factory. The blade that builds permanent custom. Millions in use. Handsome profit and no risk.

CONQUEROR GROSS RETAIL
BLADES 5/6 for 1/-

Attractive Showcards. Stocked by leading wholesalers. If any difficulty, write direct, enclosing cheque or P.O. to

OCEAN BLADES (Gt. Britain), LTD.
Sales Dept., 1-5 Bridgewater Place, London, E.C.1. Clerk: 6257
Blades made under Customers' Own Name. State quantity.

Established 1880.

TILBURY "Fort"
Dental Plate Brush

TILBURY DENTAL PLATE BRUSH
THE IDEAL BRUSH FOR CLEANING DENTAL PLATES
Draws with Sterling Silver

Made with Extra Stiff Bleached and Unbleached Bristles.

W. R. TILBURY & SON
47 FRAMPTON PARK ROAD, HACKNEY,
LONDON ENGLAND

A. S. LLOYD'S

EUX-E-SIS

**For Shaving without
Soap, Water or Brush**

CAUTION to the TRADE

**Labels on the genuine EUXESIS not
only bear signature of A. S. Lloyd
in Black Ink, but also "Prepared
only by his Widow" and signature
of 'Aimée Lloyd' in RED.**



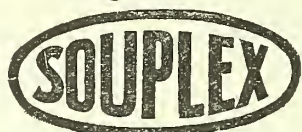
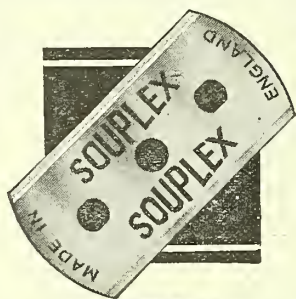
Tubes 1/6 & 3/- ~ 33 $\frac{1}{3}$ % Profit

SOLE MANUFACTURERS & PROPRIETORS:

AIMÉE LLOYD & CO. L^{TD}

**23 PANTON STREET
HAYMARKET, LONDON, S.W.1**

N.B.—When ordering from Wholesale Houses write LLOYD'S EUXESIS (WIDOW'S).



GIVE YOU 92% Profit

and are being bought more and more by men who insist on the best quality, but appreciate the necessities of a slim purse. The fine shaving qualities of Souplex blades are well known, and compare favourably with blades at twice the price.

**Retail at
2^d each**

TWO BLADES WITH TREMENDOUS SALES

Here's your
opportunity
to make

BIG PROFITS

Both widely advertised

Apply to your usual wholesaler, or, if any difficulty, write to the makers

Souplex Ltd., Morecambe



DOUBLE SIX

GIVE YOU 100% Profit

and are the finest penny blade with a rapidly increasing sales Millions have already been sold and many stockists are reaping splendid profit from them. They now represent more value than before, and the public has been quick to realise this.

**Retail at
1^d each**

6,000,000

Daily Mail *Daily Express*
Daily Chronicle *Daily Herald*

PEOPLE

Order a stock TO-DAY and make sure you do not disappoint any of YOUR Customers.

are being told about the wonderful value of LAUREL razors & blades

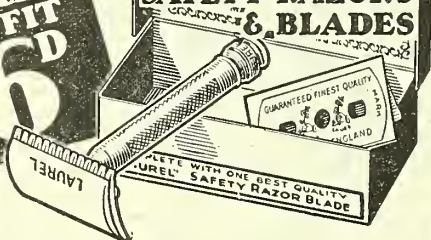
**ARE YOU
READY FOR
THE DEMAND?**

LAUREL

**SAFETY RAZORS
& BLADES**

**COMPLETE
OUTFIT**

6^d



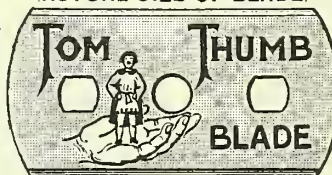
Geo. H. Lawrence, Ltd., Laurel Works, Nursery St., Sheffield

ENGLAND'S LAST WORD

IN SAFETY RAZOR BLADES
THE GREAT "TOM THUMB"

(ACTUAL SIZE OF BLADE)

Retails
at
1d.
each



Retails
at
1d.
each

MADE BY

Brooks, Haywood & Co. Ltd., Shiloh Works, Sheffield

**OVER
53% !!**

This Profit on your outlay is guaranteed to you by

The FLEET Blade



*A Sheffield
Product from the
Molten Steel to the
Finished Blade.*

Retails at 3 for 7^d.

Liberal trade-making samples given to new stockists.

Bonus offered for Window Displays.

Sample and terms from sole makers :-

DOMINION STEEL CORPORATION, Ltd.
Fleet Works, Queen's Road, SHEFFIELD.

Evening in Paris

(SOIR DE PARIS)

TWO IMPORTANT NEW LINES

In response to the obvious demand, the following creations have been added to the "Evening in Paris" series — unquestionably the leading perfumery series at the present time.

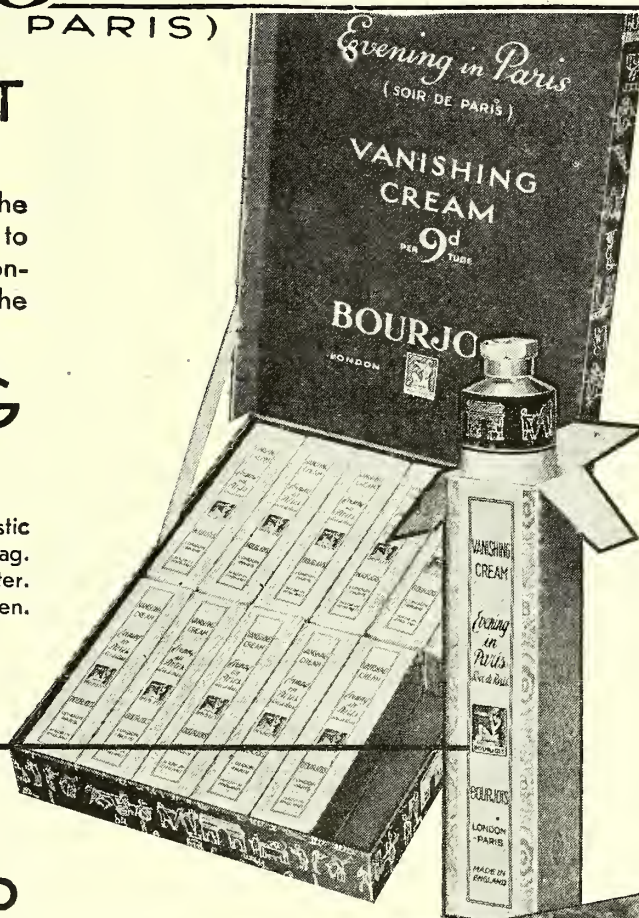
VANISHING CREAM

A most excellent cream, with the characteristic fragrance, in the popular tube for the handbag. Packed one dozen in tasteful display outer. Catalogue No. 2950. Trade price 6/- per dozen.

RETAIL

9^d

PER TUBE



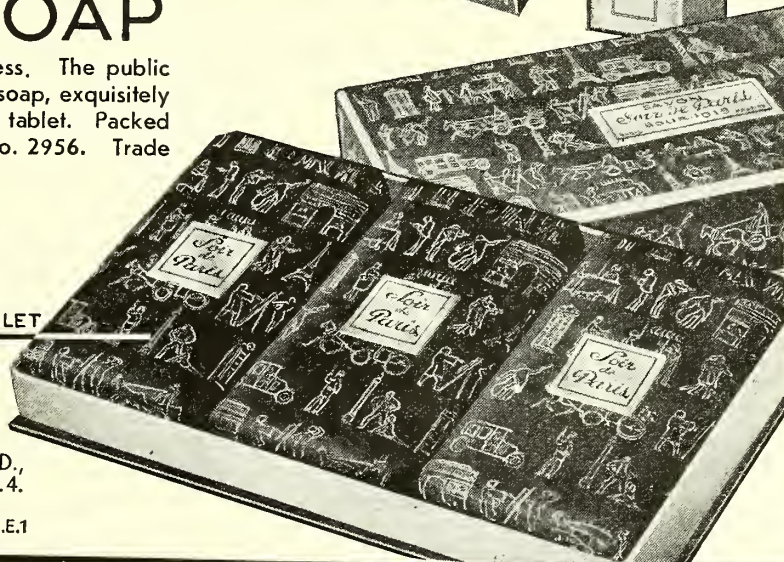
TOILET SOAP

An immediate and amazing success. The public appreciate a pure, high-grade soap, exquisitely perfumed, at the price of 6d. per tablet. Packed 3 tablets in box. Catalogue No. 2956. Trade price 12/- per dozen boxes.

RETAIL

6^d

PER TABLET



Prices for United Kingdom only.

A. BOURJOIS ET CIE, LTD.,
4, Water Lane, London, E.C.4.

Laboratories & Works:
River Plate Wharf, Upper Ground St., London, S.E.1
and 71-73, Carter Lane, London, E.C.4

LONDON **BOURJOIS** PARIS

Announcing
CLEVELAND'S
"FASTEETH"
for Dental Plates

Don't miss sales! Our advertising has already commenced. All your customers with dental plates need "Fasteeth." It prevents plates slipping and obviates "Denture Breath."

Liberal Trade Terms

Apply at once to—
THE GANNETT TRADING CO.
Temple Chas., Temple Avenue, London, E.C.4
representing
FASTEETH INCORPORATED, TORONTO,
CANADA.

For Real Good and
High Grade
**EAU DE COLOGNE,
LAVENDER WATER,
FLORAL EXTRACTS**

AND

TOILET SPIRITS

ETC., ETC.

Made with Duty Free Alcohol
Not Isopropyl

IN BULK OR AN ASTONISHING RANGE
OF PACKS

WRITE STATING REQUIREMENTS

A. B. CURTIS
Manufacturing Chemist and Perfumer
6 Ludgate Circus Buildings
London, E.C.4
WHOLESALE & EXPORT ONLY

NEW BUSINESS !!

ARE YOU CATERING
FOR THE

"HIKER"

THIS POPULAR PASTIME HAS CREATED
AN ADDITIONAL DEMAND FOR SUCH
ARTICLES AS

**SPONGES, TOILET HOLD-ALLS,
SUN SPECTACLES, BORACIC SOCKS,
CORN AND FOOT PREPARATIONS.**

STOCK UP FROM:

"NEWBERYS"
(F. NEWBERY & SONS LTD)

Cardiff :
Tredegar
House,
Hope St.

CHARTERHOUSE SQUARE
LONDON, E.C.1

Liverpool :
College
Lane

WHEN YOU VISIT LONDON
stay at the



CORA HOTEL

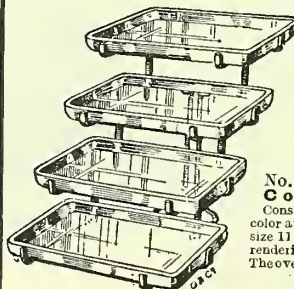
Upper Woburn Pl., W.C.1

Accommodation for 240 Guests
Near Euston, St. Pancras and Kings X.

**CENTRAL
CONVENIENT
COMFORTABLE**

H. and C. Running Water Basins in all
rooms. Bedlights. Modern conveniences
**ROOM and TABLE d'HOTE
BREAKFAST 8/6**

BOARD TERMS, applicable to a stay of 3 days or
more: Partial 11/- per day. Full Board 13/-



**THE IDEAL
Counter Display
STAND—for
TOOTH BRUSHES,
NAIL BRUSHES,
SOAPS, Etc.**

No. C.D.F. 2851 Very attractive
Counter Display Stand.
Constructed of mild steel finished Silver
color and complete with four clear glass trays
size 11 1/2 x 7 x 1 in. Each tray is slightly sloped
rendering the goods easy to see and select from
The overall height is 10 1/2", width 12", B. to F. 15"

25/- each complete

Send for our List No. C.D. 1260
DUDLEY & COMPANY, LIMITED
457 HOLLOWAY ROAD, LONDON, N.7
City Showrooms: 65-66 FINE STREET, E.C.2

EUCRYL DENTIFRICES

BRITISH MADE



EUCRYL TOOTH POWDER
EUCRYL TOOTH PASTE
EUCRYL DENTURE POWDER

Bought on Display Terms Yield :—

PROFIT ON SELLING PRICE **43%**

PROFIT ON BUYING PRICE **75%**

Continuously Advertised
Quick Sales Large Profits



EUCRYL LIMITED,
MANUFACTURING CHEMISTS,
SOUTHAMPTON.

earn

62½%

IN JULY

by selling **1/-**

SWAN DOWN
FACE POWDER

details

from all
wholesalers

HENRY TETLOW CO. LTD.
61, EAGLE STREET, LONDON, W.C.1.



Every day thousands of bottles of ANZORA are sold—it's the hair-fixative that men come to you again and again for! Despite many imitations, ANZORA'S popularity has never been seriously threatened—simply because there's never been anything else as good! Are *you* handling this quick selling big profit line? Note the new screw cap!



Every Day
is **SALES-**
day for

ANZORA
CREAM & VIOLA
BOTH MASTER THE HAIR

TRADE TERMS:

Small size, re-
tailing at 1/-
each.

8/- a dozen.

Medium size,
retailing at 1/6
each.

12/- a dozen.

Large Size, re-
tailing at 2/6
each.

20/- a dozen.

Anzora Perfumery
Co., Ltd.
London, N.W.6



MADE IN TWO SIZES

Small 5/- - per dozen

Large 8/- - per dozen

SUPPLIED IN SHOW CASES OF SIX

MANUFACTURED BY

WILLIAM TOOGOOD LIMITED, 77 SOUTHWARK ST., S.E.1

A Super-Profit of 53.3%

on

**ARLINE CAMOMILE
GOLD HAIR WASH****ARLINE SPECIAL OFFER
UNTIL SAT., JULY 2nd**

The 2/6 size CAMOMILE
GOLD HAIR WASH to be
retailed at 1/9 till July 2nd;
after that date reverting to
normal price of 2/6

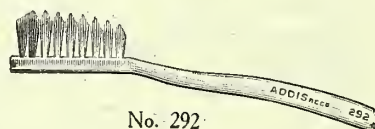
GRASP THESE FIGURES

BEFORE 1 dozen retail 21/- **33¹/₃%**
JULY 2 cost you 14/-

AFTER 1 dozen retail 30/- **53¹/₃%**
JULY 2 cost you 14/-

To Secure this Great Gain You Must
Stock up now before July 2

THE LATEST

Dental Plate Brush

No. 292

PRICE **12/8** PER DOZ.**REAL BONE HANDLE****PRESSURE GRIP SHAPE****Long-life Hard Unbleached Bristles****Obtainable from any Wholesaler**

Made in England by the

ADDIS BRUSH WORKS
HERTFORD. Est. 1780

IN THE HIGH COURT OF JUSTICE

NOTICE of INJUNCTION

TO ALL PERSONS, FIRMS, AND COMPANIES,
and particularly those interested in the business of
Chemists, Druggists, Hairdressers, and similar businesses.

HARLENE

EDWARDS HARLENE LIMITED

HEREBY give notice that in an action in the Chancery
Division of the High Court of Justice : 1932 E. 940

Between

EDWARDS HARLENE LIMITED

Plaintiffs

— AND —

S. D. SLOCOMBE

Defendant

Injunctions were, on June 10th, 1932, granted by the Court :

- 1 Perpetually restraining the defendant from infringing the plaintiffs' registered trade mark consisting of the word " HARLENE."
- 2 From selling or offering for sale any preparations for the hair not of the plaintiffs' manufacture or merchandise under or in connection with the word " HARLENE."
- 3 From supplying any such preparations in response to an order for " HARLENE," and from otherwise passing off or attempting to pass off such goods as or for the plaintiffs' goods.
- 4 For delivery up of all tickets, notices or other things the use of which would be a breach of the injunctions.
- 5 For damages or an account of profits.
- 6 For costs.

AND Notice is Further Given

that immediate legal proceedings without previous notice
will be taken against any person, firm or company using
on any goods not of the manufacture of EDWARDS
HARLENE LIMITED, either the word :

HARLENE

OR any colourable infringement of the word " Harlene "
OR otherwise infringing the trade mark rights of
EDWARDS HARLENE LIMITED.

THE CHEMIST'S COMPACT LIBRARY

Every Book by an Expert

Pharmaceutical Formulas

(P.F. Vol. 1)

The tenth edition of this, the most complete pharmaceutical formulary in the English language, comprises (1) selected formulas from the British, United States and several other pharmacopœias; (2) unofficial formulas from hospital pharmacopœias and other sources, British, colonial and foreign; (3) known, admitted and approved remedies (218 pages) taken from previous editions of "Pharmaceutical Formulas" and from *The Chemist and Druggist* Diaries; (4) concise descriptions of practical methods of manufacture, adapted to the retail shop; (5) an Appendix comprising laws and regulations governing the sale of poisons, the hours of closing, medicine-stamp duty, the use of spirits and many other data—e.g., a solubility table and chart. This volume contains 1146 pages.

Price 15s., by post 15s. 9d.

Pharmaceutical Botany

An attractively written book, dealing with the plants mentioned in the examination syllabus of the various pharmaceutical examining bodies. Botanical terms which at first sight are forbidding in appearance are explained so that the meaning is made crystal clear. A useful gift for apprentices and assistants who have not passed the qualifying examinations.

Price 5s., by post 5s. 4d.

The Art of Dispensing

The tenth edition of this well-known work is now ready. The book has been thoroughly revised and considerably improved, while maintaining the features which have made it so popular with several generations of students. It is kept by chemists in the dispensary for ready reference in cases of difficulties arising in the course of the day's work.

Price 8s., by post 8s. 6d.

Veterinary Counter Practice

Chemists interested in veterinary practice will find the work indispensable, as it deals with the ailments of horses, cattle, sheep, pigs, dogs, and poultry, and the remedies that can be supplied. New edition 1930 (Eighth) brings this book thoroughly up to date.

Price 7s. 6d. net, by post 8s.

The Photographic Chemist

This is a concise guide to chemists commencing and carrying on a photographic department. The book is a reprint of the treatise in *The Chemist and Druggist* Diary, 1926, with additional chapters and formulas.

Price 3s. 6d., by post 3s. 8d.

Diseases and Remedies

Now in its sixth edition (March 1931). It has been carefully revised by an experienced medical practitioner and parts of the book have been rewritten.

Price 5s., by post 5s. 3d.

Wootton's Chronicles of Pharmacy

In two vols., maroon cloth, comprising 770 pages.

Price 10s. 6d. net, by post 11s. 3d.

Practical Methods of Urine Analysis

This department of chemistry is one which those behind the drug counter can profitably cultivate. The object of this book is to give chemists exactly the information they want on the subject. The book is written by a working pharmacist who is expert in the subject, and has been revised by a M.B., Lond. (Third Edition.)

Price 3s. 6d. net, by post 3s. 8d.

The Chemists' Dictionary of Medical Terms and Treatment

A small book which explains the meaning of medical terms as to which customers often inquire from chemists. In addition to concise definitions of these technical terms, notes are given on the treatment of the more important ailments.

Price 3s. 6d., by post 3s. 8d.

The C. & D. Price List Formulary, "P.L.F."

All users of the C. & D. Retail and Dispensing Price List require a copy of this Formulary. It brings together the formulas for unofficial preparations, the prices of which are quoted in the Price List. It is a choice collection of good formulas for articles in everyday request by the public.

Price 2s. 6d. post free.

Provincial Hospital Pharmacopœias

Uniform with the "Chemists' Dictionary," contains 296 pages and consists of formulas for medical prescriptions used in twenty-two hospitals and infirmaries in Great Britain outside the London district.

Price 3s. net, by post 3s. 2d.

FOREIGN CORRESPONDENTS ARE REQUESTED TO NOTE THAT THE
POSTAGE IS 2d. EXTRA FOR EACH BOOK.

May be obtained at the published prices from the Wholesale Drug or Sundries House or from :—
THE CHEMIST AND DRUGGIST, 28 ESSEX STREET, STRAND,
LONDON, W.C.2

Branch Offices : Melbourne and Sydney, Australia ; Auckland, New Zealand ;
Manchester : 49 County Buildings ; Sheffield : 54 Foster's Buildings.
Glasgow : 19 Waterloo Street.

“
TRADE
MARK

NORMACOL”
BRAND.

Intestinal Evacuant.

is now widely prescribed
under the

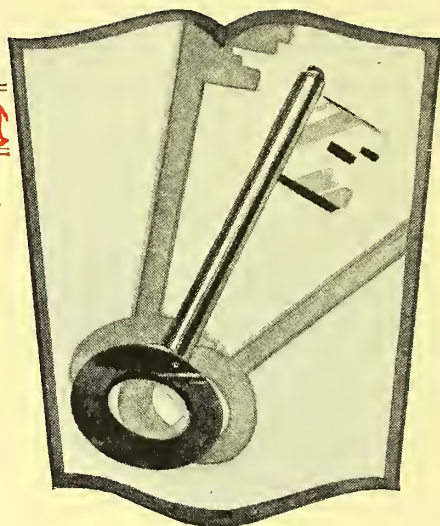
**NATIONAL
HEALTH
INSURANCE**



H. R. NAPP LIMITED,
3 & 4, Clements Inn, London, W.C.2.

Telegrams: "NAPPCHEM LONDON."

Telephone: HOLBORN 1444 (Two Lines)

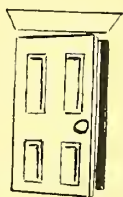
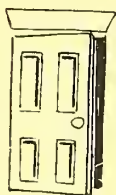


Cephos

See-foss REGD
Pronounced THE
PHYSICIAN'S
REMEDY

**opens your door many times a
day and assures you a handsome
source of profit
during every
season of the year**

Retails at 1/3 & 3/-
Powders or Tablets
Single Powders 2d.



LIBERAL TERMS OFFERED

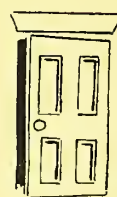
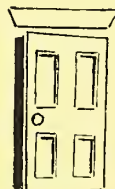
Obtain your supplies of
Cephos through your usual
wholesaler.

If any difficulty, write direct to us
and we will tell you the nearest
wholesaler who can supply you.

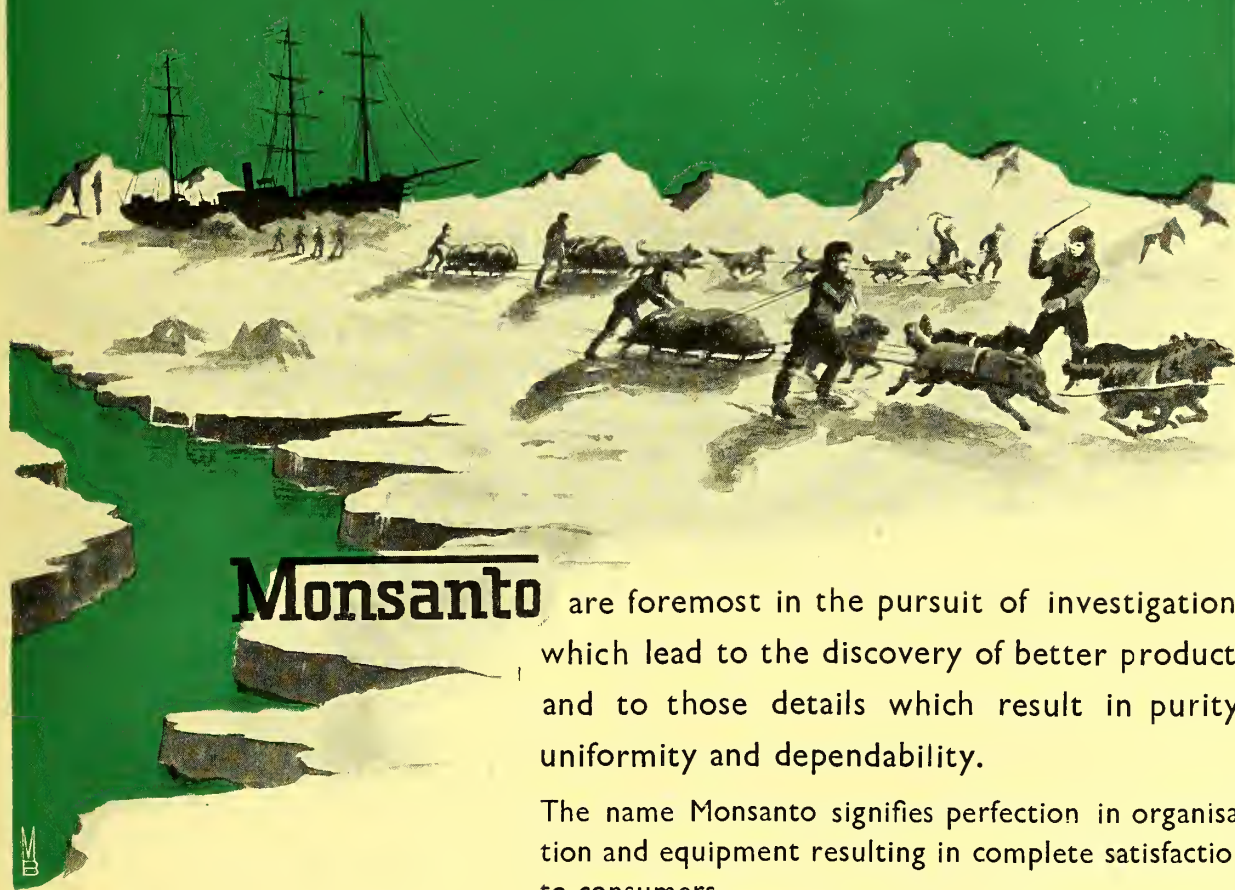
ATTRACTIVE SHOWCARDS and Display Materials available.

Write direct to CEPHOS, LTD.,
BLACKBURN, for Showcards even
though you are obtaining your
supplies elsewhere.

Headache
Neuralgia
Rheumatism
Lumbago



DISCOVERY



Monsanto

are foremost in the pursuit of investigations which lead to the discovery of better products and to those details which result in purity, uniformity and dependability.

The name Monsanto signifies perfection in organisation and equipment resulting in complete satisfaction to consumers.

MONSANTO BRITISH MADE CHEMICALS

Phenol 40/41° C. Cresol. Cresylic Acid. Disinfectants. Pyridine. Aurine. Cresotinic Acid. Lysol (Acrosyl). Benzole. Solvent Naphtha. High Flash Naphtha. Anthracene Oil. Creosote. Naphthalene. Allantoin. Methyl Salicylate. Sodium Salicylate. Salicylic Acid. Saccharin. Aspirin. Vanillin.

WORKS:
RUABON,
NORTH WALES.
WEAR TAR WORKS:
SOUTH DOCK,
SUNDERLAND.

MONSANTO CHEMICAL WORKS LTD

VICTORIA STATION HOUSE,
VICTORIA STREET, LONDON, S.W.1



ASSOCIATED WORKS:
ST. LOUIS,
U.S.A.

? HAVE YOU HAD YOUR DISPLAY OF *Elastoplast*

HERE—in bright orange, black and buff—is a complete display of Elastoplast specialities which will be sent to you free as a special Spring offer with one small order for a 5/- composite outer of these well-known products.

Modern

**100%
BRITISH**



Samples and
literature free
on request.

T. J. SMITH & NEPHEW LTD.
Enquiries to **Dept. "C2," 42 Tavistock Sq.**

First Aid



OTHER PRODUCTS

Cellona—Plaster of Paris Bandages.
50% lighter than any other P. O. P.

Semiplast—Half spread Elastoplast.
Only the first turn of plaster touches the skin.

Viscopaste Bandages — Improved
Unna's Paste Type (Z. O. and
Gelatine).

Viscopaste Bandages—

ELASTOPLAST DRESSINGS combine the elastic plaster with medicated pads and mould easily wherever applied. Instantly applied, unaffected by washing ; seal and heal the wound. They will bring you extra business and increase your goodwill.

ELASTOPLAST BANDAGES are the last word in support for sprains, strains and all injuries to joints.

*Order a 5/-
outer of
Elastoplast
Dressings—
through your
Wholesaler.
It contains
3d. & 6d. packets*

TRADE PRICE 5/-
RETAIL PRICE 7/6



HULL MANCHESTER LONDON GLASGOW
London, W.C.1

A NORTH BRITISH PRODUCT



Made from the highest quality rubber in delicate pastel shades of Pink, Mauve, Blue and Green. Obtainable from your Wholesaler.

THE NORTH BRITISH
RUBBER COMPANY, LTD.,
200 Tottenham Court Rd., W.1

NORTHERN SALES OFFICE:
45 Hanover Street, Edinburgh, 2.

DE-LUXE

MOULDED HOT WATER
BOTTLE • RESERVED
EXCLUSIVELY FOR
THE CHEMISTS' TRADE

**FIXED RETAIL
PRICE**

2'11

J. F. MACFARLAN & CO.

MORPHINE

CODEINE

APOMORPHINE

DIAMORPHINE

ETHYL MORPHINE

PAPAVERINE

ATROPINE

EMETINE

ESERINE

HYDRASTINE

PILOCARPINE

STRYCHNINE

ALOID

CHRYSAROBIN

PODOPHYLLIN

and

SCAMMONY RESINS

SALICIN

JALAP

EUONYMIN

HAMAMELIN

IRIDIN

LEPTANDRIN

OPIUM, RAW

and POWDER

PULV. IPECAC. CO.

Macfarlan's

ETHER AND CHLOROFORM

*are unsurpassed in purity,
stability and anaesthetic
efficiency.*

109 Abbeyhill, EDINBURGH. 32 Bethnal Green Road, LONDON, E.1

Works: ABBEYHILL and NORTHFIELD, EDINBURGH.



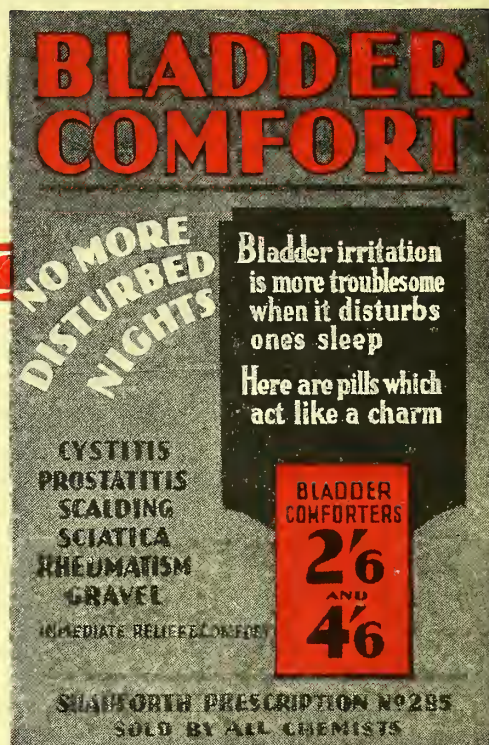
**BILVIE LION
FOX-NUTS**

**THE GREAT
HEART
AND
NERVE
TONIC**

Shadforth Prescription
No. 632

2/6 4/6
SOLD BY ALL CHEMISTS

**YOUR
SALES
WILL BE
HELPED
BY
THESE**



**BLADDER
COMFORT**

**NO MORE
DISTURBED
NIGHTS**

Bladder irritation
is more troublesome
when it disturbs
ones sleep

Here are pills which
act like a charm

**BLADDER
COMFORTERS
2/6
AND
4/6**

CYSTITIS
PROSTATITIS
SCALDING
SCIATICA
RHEUMATISM
GRAVEL

IMMEDIATE RELIEF CONFIDENT

SHADFORTH PRESCRIPTION NO. 285
SOLD BY ALL CHEMISTS

SHADFORTH POSTERS

I eat what I like

THANKS TO...
WHITE LIONS

Indigestion - Acidity - Gastritis
Pain after eating.

CURED BY:
"SHADFORTH" WHITE LION TABLETS No. 1077

1/4 2/6
SOLD EVERYWHERE

PRINTED IN
4 COLOURS
SIZE 20×25.

We are switching
our Mail Order
trade over to
the Chemist
and telling the
Public that any
Chemist can
supply Shadforth
Prescriptions at
short notice.

Send Post Card for
Trade Terms and
open up a profit-
able connection.



NEVERILL

"OLD SALTS"

for
**STOMACH
LIVER and
BLOOD**

BOUNDING HEALTH
JOIE DE VIVRE

7 1/2

SHADFORTH PRESCRIPTION SOLD EVERYWHERE

Fanger's Catalogue

19



32

PREPARED SPECIALLY FOR
THE USE OF

CHEMISTS & PHARMACISTS

by

THE CHEMISTS' HOUSE

for

THE CHEMISTS' WANTS.

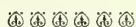
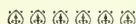
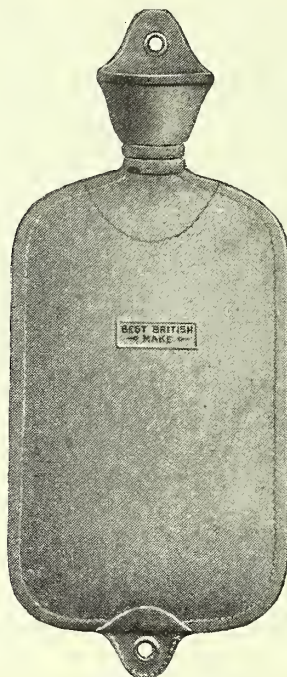
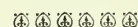
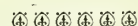
THE MOST UP-TO-DATE LIST
SINCE THE NEW TARIFFS
CAME INTO FORCE.

Head Office & Showrooms

258, EUSTON ROAD, LONDON, N.W. 1

NOW READY.

If you have not yet received your copy
please ask for same. A postcard will do.

BRITISH MADE**ALL RUBBER****CAPACITY
3 PINTS****HAND MOULDED****HEAVY
VULCANITE
STOPPER****RED SHADE ONLY
(Size 11" x 7")****Made Specially for this House****Fig. 141 B.****Price 20/- per doz.***Order early if you do not want to be disappointed***QUANTITY REDUCTIONS ON APPLICATION**

COVERS for this bottle	{	FANCY RIPPLE	- 4/6 doz.
		VELOUR	- - - - 6/9 ,,

**ARTHUR BERTON LIMITED***Registered Offices, Showrooms and Factory:***Britannia House, 256-260 Old St., London, E.C.1***(NEARLY OPPOSITE OLD STREET TUBE STATION)**Telegrams: "AYBELIM, FINSQUARE, LONDON."**Codes: A.B.C., 5th EDITION.**Telephones: CLERKENWELL 1346-7-8-9.**Glasgow Branch:***29/31 DUKE STREET***'Phone: Bell 702.**Manchester Branch:***36 CHAPEL STREET***'Phone: Blackfriars 4536.*

LUTON HAT DYES

Straw Hats have definitely returned to favour and home economy is universal.

This means a big demand for
"LUTON" HAT DYES

CAN YOU MEET IT?



NEW AND
ATTRACTIVE

SHOW
MATERIAL

SUPPLIED WITH
EVERY
ORDER

EXPORT

SPECIAL TERMS
AND PRICES
FOR EXPORT

WRITE FOR
CATALOGUE



SMALL SIZE

Price - 7/6 per doz.
Retail, 10d. per bott.



STANDARD SIZE

Price - 12/- per doz.
Retail - 1/4 per bott.

NOW IN TWO SIZES—Our Standard Size and Price remain unaltered, but in response to thousands of requests we have introduced a new small size. This meets every purse and is sufficient for the small hats. You will sell just as many of the Standard Size as formerly, but you can also meet the demand for a smaller and cheaper line.

Do not stock inferior Dyes—push "LUTON" and retain the confidence of your Lady Customers. Each bottle in separate carton, complete with Brush, in the following colours, Dull or Glossy: Black, Navy Blue, Brown, Nigger Brown, Dark Brown, Nut Brown, Burnt Straw, Royal Blue, Nattier Blue, Saxe Blue, Poppy, Purple, Royal Purple, Jade Green, Emerald Green, Heliotrope, Grey, Rust, Pink, Olive Green, Myrtle Green, Old Rose, Primrose, Ruby. Any other shade can be matched or supplied.

ORDER TO-DAY FROM

WHITAKER & CO. (KENDAL) LTD. Dye Specialists, KENDAL, ENG.

MAKERS OF AURORA COLD WATER DYES, WINNER HOME & WINNER STOCKING DYES, VELT, &c.

Reduced Facsimile of Artistic Carton in Colours.

Reduced Facsimile of Artistic Carton in Colours.

THE HOUSE FOR

DRUGGISTS' SUNDRIES

SURGICAL SUNDRIES
HOT WATER BOTTLES
B.P.C. DRESSINGS
TOILET BRUSHWARE

TRADE



MARK

SPECIAL ALL GLASS
SPRAYS. R.J.R. SERIES
LETTERED DELF JARS
NOVOLA DELFETTE JARS
ELASTIC HOSE

BRITTON, MALCOLM & WAYMARK, LTD.
38 SOUTHWARK BRIDGE ROAD,
LONDON, S.E.1

Telephone:
Waterloo
1442 (2 lines)

Near Southwark Bridge, South Side of River.

Telegrams:
"Clinbritic,
Boroh, London."

The World's Best Seller for VARICOSE VEINS

is the famous



also for

BEAUTY of the LEGS

(Medically approved)

Permanent relief, strong support,
perfect comfort.

Hygienic, Washable and Invisible
under the finest silk hose.

The patented heel retains position
and silk hose is never damaged.

INTENSIVE NATIONAL
ADVERTISING keeps up
sales everywhere.

All the best class Chemists and leading
London and Provincial Stores stock
the "Academic" Rubberless Stocking

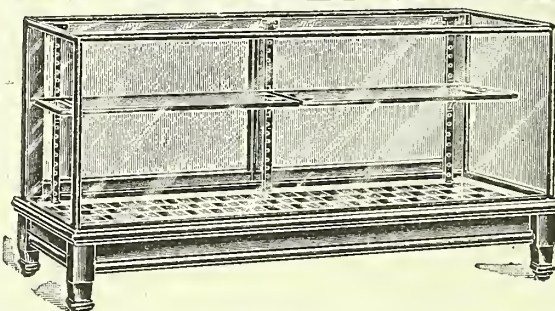
MADE IN ENGLAND

WRITE for DESCRIPTIVE BOOKLET
and full trade terms

"ACADEMIC" DEPOT, 158/162 Oxford St., London, W.1

Phone: Museum 6313.

KING'S "SUPER" SHOWCASES



No. H 2109. OAK OR MAHOGANY FRAME SHOWCASE.
New 3" Drawn Plate-Glass Front, top and sides, with 2 Clear-Glass
Sliding Doors at back on roller bearings. Interior fitted with
brown-bronze Standard Bars and Adjustable Brackets, and 1 row of
Plate-glass Shelves, 12" wide x 3/4" thick, polished edges, running the
whole length of the Showcase, the bottom of Showcase fitted with
Parquet Floor. Over-all dimensions: 6 feet long x 3 feet high
x 2 feet back to front.

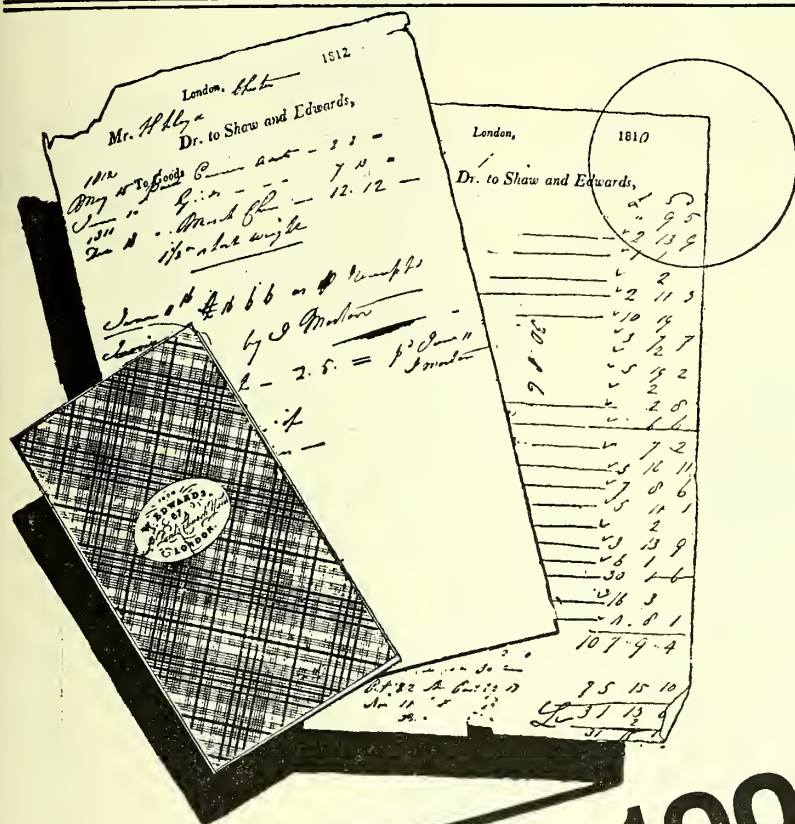
£10 : 0 : 0

NOTE.—The above prices are Carriage Paid within 20-mile
area of Oxford Circus, London, otherwise carriage forward.
Insured by us in transit.

Send at once for full list No. 1013, post free, on application

J. C. KING, LTD.
42-60 GOSWELL ROAD, LONDON, E.C.1

Phones: CLERKENWELL, 2316 (6 lines).



Invoices issued 122 years ago

FOR OVER 100 YEARS

the House of Edwards
has been at the
service of Chemists
PACKED PROPRIETARIES
PERFUMERY & TOILET
PHOTOGRAPHIC
VETERINARY
SURGICAL

W. EDWARDS & SONS
14-18 NILE ST., CITY ROAD,
LONDON, N.1



A Mark of Progress.

1932

Obtainable only from Chemists



BRITISH
MADE
Pure White Sulphite

Packed in half gross cartons free.

All orders carriage paid.

Showcards and free samples
on application.

Awarded the Certificate of
the Institute of Hygiene for
PURITY.



COSTS 4d

SELLS AT 8d

BRITISH
MADE

Pure Manilla

J. RUTHERFORD & Co. Ltd.

Victoria Paper Mills, Victoria Road, Holloway, London, N.7



AS ACTUAL MANUFACTURERS
WITH A PRACTICAL MANUFACTURING EXPERIENCE
EXTENDING OVER MANY YEARS

(ESTABLISHED SINCE 1857)

WE OFFER A VAST RANGE OF DEPENDABLE UP-TO-DATE

DRUGGISTS' SUNDRIES

AND

TOILET ACCESSORIES

ORGANISED FOR SERVICE, WE ARE ABLE TO PRODUCE
 IN ANY QUANTITIES THE FOLLOWING SPECIALITIES, FOR
 WHICH WE ARE WELL-KNOWN THROUGHOUT THE WORLD.

SOLPORT'S GOODS ARE GOOD GOODS

POWDER PUFFS
 OF EVERY KIND

"PORTIA" NON - FLAM
 SPORTS AND READING
 EYESHADES AND GOGGLES

"PORTIA" WATERPROOF
 TRAVELLING
 COMPANIONS

"WATERSPRITE"
 AND OTHER
 WASHING SQUARES

"EASIFIX"
 AND ALL OTHER
 FINGER STALLS

"PORTIA"
 AND ALL OTHER CORN
 AND BUNION PLASTERS

YEO'S
 AND OTHER INHALERS
 AND RESPIRATORS

**S
O
L
P
O
R
T
S**

VELOURS AND EVERY
 OTHER KIND OF HOT
 WATER BOTTLE COVERS

WATERPROOF
 SPONGE BAGS AND
 HOLDALLS

LOOFAH
 AND OTHER BATH STRAPS
 AND GLOVES

"KUTE"
 AND OTHER
 WRIST STRAPS

EMERY BOARDS
 AND OTHER MANICURE
 REQUISITES

"LIMPET" AND OTHER
 VACCINATION PADS AND
 SHIELDS

STYPTIC PENCILS
 Etc., Etc.

SOLPORT
BROTHERS LIMITED

ENEMA SHIELDS
 Etc., Etc.

184-192 GOSWELL ROAD, LONDON, E.C.1.

LIPVAC FLASKS

Lipvac No. 5 "HARDGLAS"

NOW MADE IN

ENGLAND



NO INCREASE IN SELLING PRICE !

No. 5 LIPVAC PINT SIZE
Fixed selling price, 2/6. Trade, 22/- doz.

2/6

No. 5 LIPVAC QUART SIZE
Fixed selling price, 4/6. Trade, 39/- doz.

Immediate delivery from your usual Wholesaler.

Guaranteed by LIPVAC FLASKS LIMITED, 8 & 9 Ludgate Square, London, E.C.4.

*Your Wholesaler
can supply*

675-700 SHEETS

100% PURE

NO PRINTING INK

DUST FREE CARTON

NEAT REELING

POPULAR PRICE

IDEAL FOR DISPLAY



Miss Muffet Toilet Paper Co.

1 Julian Rd., West Bridgford, Nottingham

MAKE A SHOW LIKE THIS...



AND MAKE BONUS PROFITS

Our display cartons and showcards are very striking, and will prove themselves powerful "silent salesmen."

BUY ON BONUS TERMS!

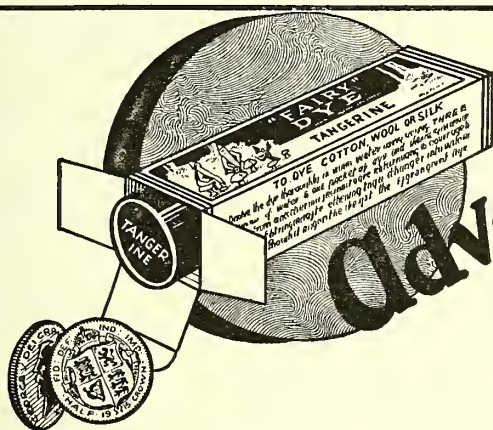
ALLCOCK brand POROUS PLASTERS

75% on COST 7/6 profit on 10/- outlay. Cost 10/- per dozen, 14 to the dozen. Retail 1/3 each.

ALLCOCK brand CORN PLASTERS

50-160% on COST 6/9 to 19/3 profit on 12/- outlay. Cost 12/- per dozen, 15 boxes to the dozen. Retail 1/3 per box of 10 Plasters or 2½d. each.

Allcock Manufacturing Co., Birkenhead



**Advertised goods
yield quick
profits**

FAIRY DYES

are big sellers—always in popular demand. They mean quick turnover and liberal profits. Fairy Dyes are forging steadily ahead and you should periodically inspect your stocks.

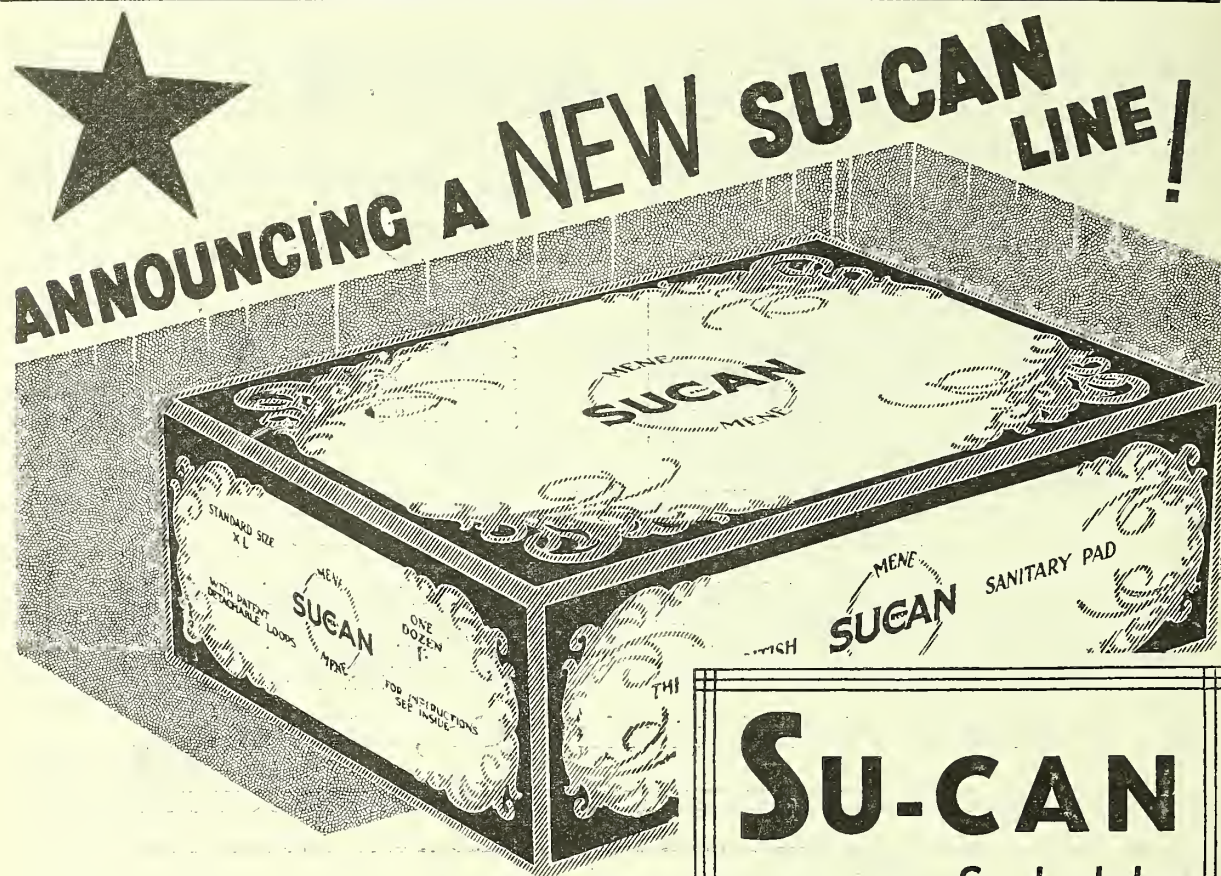
Retailed at 2d. per tube—attractively packed. 31 shades and colours.

Be wise—stock

**LONDON DEPOT:
292 UPPER ST.,
ISLINGTON - N.1**

Fairy Dyes

FAIRY DYES, LTD., GLASGOW, N.W.



Su-can quality and comfort at the popular price of 1/- per dozen—here, unquestionably, is a line that will bring you many new customers . . . more easily earned profit.

This new "STANDARD" size—with patent loops, but without a waterproof back—will be extensively advertised to millions of women through the leading newspapers and periodicals. A big demand is sure to follow. You have only to carry adequate stocks to ensure a large increase in your towel sales. Send your order NOW!

Entirely BRITISH MADE by

ROBINSON & SONS LTD

SU-CAN
Soluble
"STANDARD" SIZE
1' (LOOPEO)
- PER DOZEN
IN CARTONS

For the convenience of distributors the contents of each carton are packed in a plain wrapper ready to hand to customer. The carton may be discarded.

TRADE PRICE

8/9 per doz. cartons. Stocked by the leading Wholesale Drug Houses at above price.

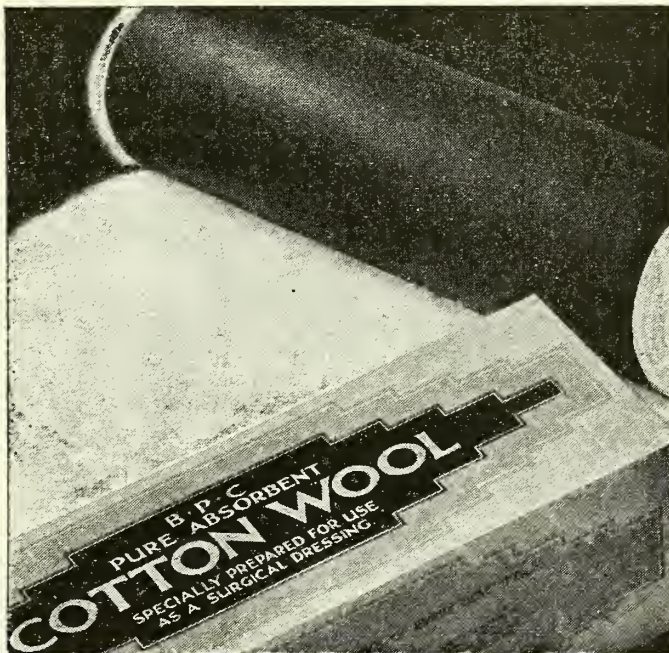
Ask for Striking New Window Showcards.

**ACTUAL
SPINNERS, WEAVERS
& BLEACHERS**

Surgical Dressings

Robinson's make a special feature of attractively designed cartons and wrappings suitable for overprinting with your name and address, having a staff of artists specially trained for this branch of the trade.

Your Enquiries
are invited.



SELL LINT BEARING THIS TRADE MARK

Warranted Pure
Tears Easily

CELLULOSE WADDING

Noted for high absorbency, cheapness and efficiency.

Also Manufacturers
and Sole Proprietors of

"GAMGEE TISSUE"

This Cotton Tissue is for the Dressing of Wounds, and the making of Splints and Moulds and Chest Protectors.

CAPSICUM TISSUE—

made from our well-known Gamgee Tissue, charged with the active essence of Capsicum and Methyl Salicylate.

ABSORBENT COTTON LINTS, WOOL, GAUZES, ROLL BANDAGES, either plain or medicated.

ASEPTIC DRESSINGS of all kinds,
packed under ROBINSON'S PATENT.

WOOD WOOL WADDING—Pinewood
fibres intimately mixed with absorbent
cotton wool.

SANITARY TOWELS & MATERNITY
PADS.

DRESSINGS — "B.P.C." "N.H.I." &
FIRST AID, in an attractive new range
of cartons and special wrappings suitable
for overprinting.

WHEAT BRIDGE MILLS, CHESTERFIELD

LONDON OFFICE:
168 OLD STREET
E.C.1



ARE YOU BUYING PRINTING THAT WILL INCREASE SALES?

HAVE YOU EVER STOPPED TO CONSIDER FOR A MOMENT OR TWO THAT ALMOST EVERY BUSINESS IS IN SOME MEASURE DEPENDENT FOR ITS SUCCESS ON THE KIND AND CLASS OF PRINTING IT USES? HAVE YOU EVER CONSIDERED THAT PRINTING IN

BUSINESS HAS TWO FUNCTIONS—TO CONDUCT BUSINESS AS WELL AS TO GET IT? AND WHILE YOU ARE CONSIDERING, ARE YOU SATISFIED WITH THE KIND AND CLASS OF PRINTING YOU ARE NOW USING. IF YOU ARE, AND IT IS DEFINITELY HELPING TO INCREASE YOUR BUSINESS, THEN STICK TO YOUR PRINTER. IF YOU ARE NOT SATISFIED, AND FEEL THAT YOUR PRINTING COULD BE MADE MORE FORCEFUL AND SALES-COMPELLING, LET US SHOW YOU HOW WE CAN HELP YOUR BUSINESS BY PRODUCING FOR YOU THE CLASS OF PRINTING THAT WILL HELP IT TO GROW.

WAIDES for *Good* Printing

THOMAS WAIDE & SONS LTD., The Printers, KIRKSTALL ROAD, LEEDS

METHYLATED SPIRITS

THE METHYLATING CO., LTD.

REGISTERED OFFICES:

KINNAIRD HOUSE,
PALL MALL EAST,
· LONDON, S.W.1 ·

Telegrams: "METHCOLIM, 'PHONE, LONDON."

Telephone: WHITEHALL 6964 (2 lines.)

BEST QUALITY
OBTAINABLE

PROMPT DELIVERY
GUARANTEED

DISTRIBUTING DEPOTS:

The Methylating Co., Ltd.,
Chancellor's Road, Hammersmith,
LONDON, W.6

The Methylating Co., Ltd.,
337, India Building, Water Street,
LIVERPOOL.

The Methylating Co., Ltd.,
Dolphin Street, Ardwick Green,
MANCHESTER.

The Methylating Co., Ltd.,
Cheese Lane, BRISTOL.

The Methylating Co., Ltd.,
Allan Street,
Bridgeton, GLASGOW.

The Methylating Co., Ltd.,
19, Mitchell Street,
LEITH.

Also at Hull:—

Agents:—

Hull Distillery Co., Ltd.,
Salt End, Hedon,
HULL.

Please ask for our Price List and Pamphlet on Methylated Spirits Regulations, &c.; also for our Booklet, "THE NEW WAY TO REMOVE CARBON," which describes a new and simple method of decarbonising Motor Car engines by the use of Methylated Spirits.



The **AVENUE PRESS**
L. UPCOTT GILL & SON LTD.
55 & 57 · DRURY LANE
LONDON · W · C · 2

TELEPHONE
 Temple Bar 10458

TELEGRAMS
 Upcottic London

DESIGNERS & LITHOGRAPHERS · LETTERPRESS · NEWSPAPER · MAGAZINE
 GOVERNMENT AND CORPORATION PRINTERS · TRADE STEREOTYPERS

WE SHALL BE PLEASED TO QUOTE
 YOU FOR ANY STYLE OF PRINTING

Printers of
The Chemist and Druggist



Printers of
The Chemist and Druggist Diary

Potter's CATARRH PASTILLES



P.A.T.A. 1s. 3d.
PER DOZ. 11s. 0d.
BOXES half doz.

Of outstanding efficacy
and merit. They have
captured the approval of the Public.
There is good business in this line
for you.

POTTER & CLARKE Ltd.

60-64 ARTILLERY LANE, LONDON, E.1.

Manchester: 24 Luna Street, Great Ancoats

Phone: Bishopsgate 4761 (5 lines)

Grams: "Horehound, Phone, London" (2 words)

Potter's ASTHMA CURE

Esteemed for efficiency
all over the world. Widely
advertised at home and
abroad. Purchase direct
or through your usual
Wholesaler.

P.A.T.A. 1/6. 14/- doz.

Asthma Cigarettes
1/6. 14/- doz.

Asthma Smoking
Mixture 9d. 7/- doz.

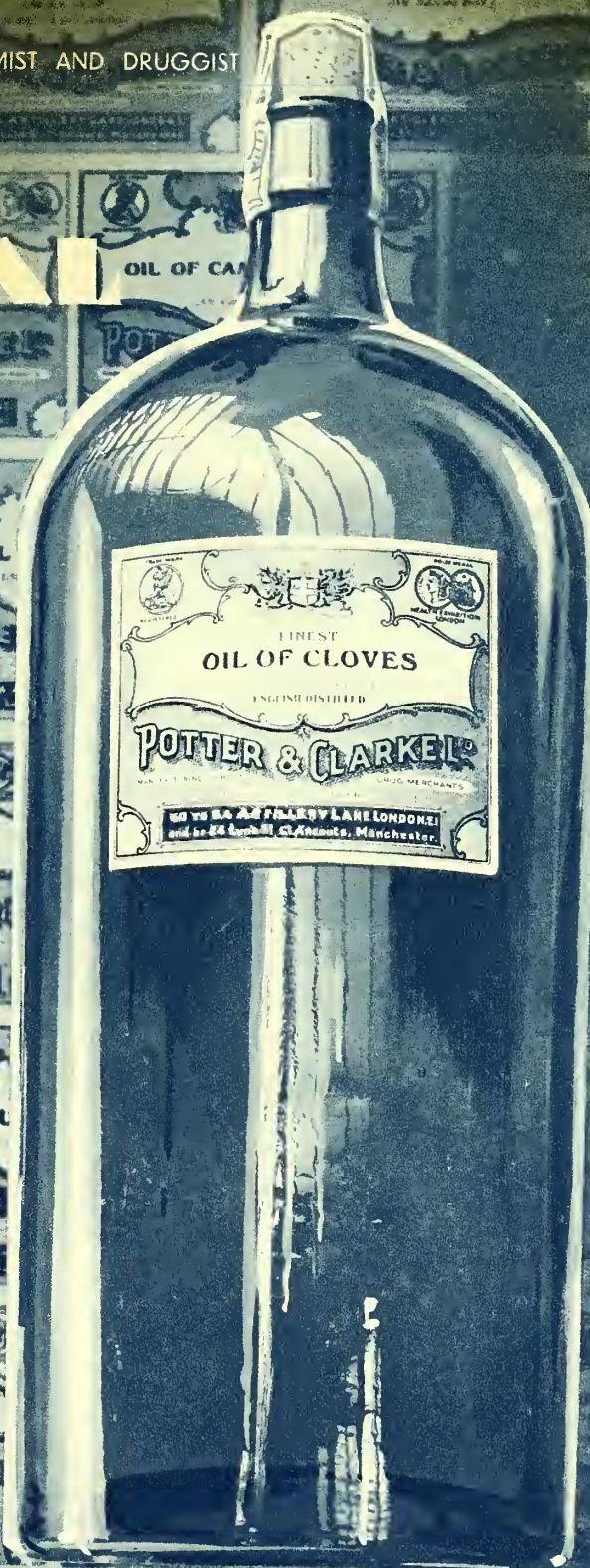


POTTER & CLARKE Ltd.

60-64 ARTILLERY LANE, LONDON, E.1.

Manchester: 24 Luna Street, Great Ancoats

ESSENTIAL Oils



EUGENOL
GERANIOL
OIL OF CITRONELLA
CLOVES
CORIANDER
CINNAMON
JUNIPER
NUTMEG

LYPTUS

EUGENOL
English manufacture

EU

We also invite enquiries for
Jalap Resin, Jalapin Resin,
ISO-EUGENOL
English manufacture

Alain
Resin
Resin

Resin

POTTER & CLARKE

POTTER & CLARKE Ltd.

60-64 ARTILLERY LANE, LONDON, E.1.

Manchester: 24 Luna Street, Great Ancoats

Phone: Bishopsgate 4761 (5 lines)

Grams: "Horehound, Phone, London" (7 words)

Dr. Thompson's
DANDELION
COFFEE

for Dyspepsia

Made entirely from English
 Dandelion Root, Roasted
 and Ground



1/- Enamelled Tins P.A.T.A. 8/- doz.
 1/9 " " " 15/- "
 3/- " " " 26/- "

POTTER & CLARKE Ltd.

60-64 ARTILLERY LANE, LONDON, E.1.

Manchester: 24 Luna Street, Great Ancoats

Phone: Bishopsgate 4761 (5 lines)

Grams: "Horsehound. Phone: London" (2 words)

Dainty POT - POURRI

*Fragrant Sweet Coffers
made of organdie
silk and flowers*



No. 4.
Two-thirds actual size



No. 5.
Half actual size

EACH PACKED IN A DAINTY CASE
No. 4. Floral Bouquet. Price 8/- dozen
No. 5. Floral Bouquet. Price 21/- dozen

Write for our coloured illustrated Price List

POTTER & CLARKE Ltd.

60-64 ARTILLERY LANE, LONDON, E.I.

Manchester: 24 Luna Street, Great Ancoats

Phone: Bishopsgate 4761 (5 lines)

Grams: "Horsehound, Phone, London" (7 words)

Dr. Thompson's

DANDELION COFFEE

for Dyspepsia

Made entirely from English
Dandelion Root, Roasted
and Ground



1/-	Enamelled Tins	P.A.T.A.	8/-doz.
1/9	"	"	15/- "
3/-	"	"	26/- "

POTTER & CLARKE Ltd.

60-64 ARTILLERY LANE, LONDON, E.1.

Manchester: 24 Luna Street, Great Ancoats

Dainty POT - POURRI

*Fragrant Sweet Coffers
made of organdie
silk and flowers*



No. 4.
Two-thirds actual size



No. 5.
Half actual size

EACH PACKED IN A DAINTY CASE
No. 4. Floral Bouquet. Price 8/- dozen
No. 5. Floral Bouquet. Price 21/- dozen

Write for our coloured illustrated Price List

POTTER & CLARKE Ltd.

60-64 ARTILLERY LANE, LONDON, E.1.

Manchester: 24 Luna Street, Great Ancoats

Phone: Bishopsgate 4761 (5 lines)

Grams: "Horsebound" Phone London (2 words)

MALTED SLIPPERY ELM FOOD



In three sizes.

Retail Prices 9d., 1s. 8d., 2s.

Per dozen 6s. 6d., 15s. 1/6 each

P. A. T. A.

This remarkable Food has been described as the most nourishing in the world. It has a beneficial and soothing effect in all cases of gastritis, colitis, etc.

Free samples for counter distribution.

Handsome Showcard supplied with all orders.



**MALTED SLIPPERY
+ ELM COCOA +**

4 oz. 1/- P. A. T. A. 8/- doz.

Free Samples, Showcards, Dummies.

POTTER & CLARKE Ltd.

60-64 ARTILLERY LANE, LONDON, E.C.1.

Manchester: 24 Luna Street, Great Ancoats

HERBS in PACKETS

These Herbs have the largest sale of any brand in the U.K.



MEDICINAL HERBS

2d. Packet. 1/4 dozen
15/- gross.

CULINARY HERBS

1 1/2d. Packet. 1/1 dozen
12/- gross

New Season's Camomile Flowers, English Medicinal Herbs and Extracts,
Poppy Heads, White Clover Honey, &c.

POTTER & CLARKE Ltd.

60-64 ARTILLERY LANE, LONDON, E.1.

Manchester: 24 Luna Street, Great Ancoats

Phone: Bishopsgate 4761 (5 lines)

Grams: "Horsehead" Phone: "London" (2 lines)

CRUDE DRUGS



ORIGINAL CASE OF
SHENSI RHUBARB

Elect Shensi, Canton
Rounds and Flats, Rough
Rounds, Powdered
Rhubarb to suit all
requirements, Trimmed
Rhubarb, in 1lb. boxes.



ORIGINAL BALE OF FINEST
SLAB SLIPPERY ELM

Slippery Elm Bark (*Ulmus Fulva*)
and all grades of powder
ground in our own mills.



ORIGINAL CASE OF FINEST FLAKE
TRAGACANTH

We grind a variety of powders to suit
all requirements, and shall be
pleased to send samples and prices
on request.



ORIGINAL BALE OF
CASCARA BARK

Liquid Extract of
Cascara. Granulated
Extract of Cascara for
tablet makers. Cascara
Tablets packed and
in bulk.

POTTER & CLARKE Ltd.

60-64 ARTILLERY LANE, LONDON, E.1.

Manchester: 24 Luna Street, Great Ancoats



**BARRETTS
ARE
SPECIALISTS
IN
PACKED PHARMACEUTICALS**

Barrett Products are acknowledged to be unique in pack and finish and of an unusually high standard of quality. They are retailed exclusively by qualified Chemists and show a handsome profit.

GET OUR AGENCY TERMS

BARRETT PROPRIETARIES LTD.

MANUFACTURING CHEMISTS

OLD MILL STREET, BROOKHOUSE, BLACKBURN

ABERDEEN **BPC** SEPT. 1932

WILLIAM DAVIDSON

LIMITED

Palmerston Rd., ABERDEEN

ESTABLISHED 1862.

*Our aim is high.
We ever try
To have folks in our
debt :
For quality and ser-
vice nigh
The best that they
can get.*

DEALERS IN CHEMICALS DRUGS AND DRUG SUNDRIES

Patent Medicines and Proprietary Articles

Telegrams : "Drugs," Aberdeen.

ENQUIRIES INVITED.

Telephones : - 3148-3149

OUR AIM IS TO MERIT BUSINESS BY QUALITY AND SERVICE.

ONLY A SMALL LINE

BUT WITH

**HUGE
SALES!**

Wasp Flybands take up no room on your shelves—cleanest, quickest and best flycatcher—are always in perfect condition—never any 'dead' stock. British-made—brings astounding repeat sales.

**WASP
FLYBAND**

Manufactured by :—
F. W. Hampshire & Co. Ltd.,
Sunnydale, Derby.

"KOF-OH"

BRAND

PROPRIETARIES

	Doz.
1/3 KOF-OH Brand Cough Cure	11/6
3/- " " " " Tablets	27/-
1/3 " " " " " " " " " " " "	11/6
4d. " " " " " " " " " " " "	2/8
7½d. " " " " " " " " " " " "	4/6
1/3 " " " " " " " " " " " "	12/-
3/- " " " " " " " " " " " "	28/-
3/- " " " " " " " " " " " "	28/-
3/- " " " " " " " " " " " "	28/-

SPECIAL TERMS for Assorted Order value £2 nett
10% allowed for 14 days' Window Display.

Free Packages.

Carriage Paid.

KOF-OH CO., LTD. Manufacturing Chemists
EVERTON - LIVERPOOL

IRVING'S YEAST-VITE LIMITED

PROCEEDINGS have recently been instituted by IRVING'S YEAST-VITE, LIMITED, against WALFOX, LIMITED, manufacturers of medicinal preparations, in consequence of their use and issue of certain leaflets headed:

"The Public Prescription Service, Copies of Famous Remedies, Walfox Brand."

On an Application for an Interlocutory Injunction which came before Mr. Justice Clauson on the 27th day of May, 1932, the Plaintiffs by their Counsel withdrawing any charge of dishonesty against the Defendants, the Defendants gave an undertaking in the following terms:

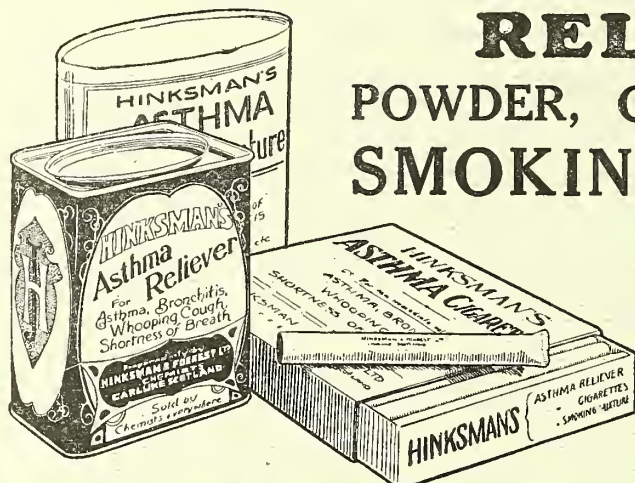
- (1) Forthwith to cease to display or issue the leaflets to the public or the Defendants' wholesalers or retailers, or any showcard, poster, advertisement, or literature reproducing the same.
- (2) To abstain in future in any trade literature displayed or issued by the Defendants to the public or to the Defendants' wholesalers, retailers, or servants from using the name "Yeast-Vite" except in connection with the sale of the Plaintiffs' goods, provided that if the Plaintiffs advertise the fact of this settlement having been arrived at, the Defendants shall not be precluded under the foregoing terms of the judgment from replying to such advertisement and in so doing using any of the said names.
- (3) Upon oath of their proper officer to deliver up to the Plaintiffs or destroy all leaflets, posters or other trade literature, use of which would be a breach of the aforesaid undertakings or either of them.
- (4) To send to their wholesalers or retailers a circular letter containing the terms of a draft initialled by Counsel.

It was further ordered that the Defendants should pay to the Plaintiffs the sum of £25, as agreed damages, together with their costs of the Action to be taxed by the Taxing Master.

Notice is hereby given that proceedings will immediately be taken against any person using the name referred to in the manner complained of in the above-mentioned proceedings.

HINKSMAN'S ASTHMA RELIEVER

POWDER, CIGARETTES AND
SMOKING MIXTURE



RETAIL 1/6 EACH
P.A.T.A.

Bring instant relief to all sufferers
and GREAT GOODWILL to all
who supply them.

MAY BE HAD THROUGH YOUR USUAL
WHOLESALE HOUSE OR DIRECT FROM
THE MANUFACTURERS:

HINKSMAN & FORREST, Ltd., 17 High St., CARLUKE, Scotland

Distributing Agents for London District, Messrs. MAY ROBERTS & CO., Clerkenwell Road.

THE
**BEST KNOWN
and PROVED
STRONGEST
ADHESIVE** in the world

SECCOTINE
REGD.

SECCOTINE!—famous for nearly fifty years—the only adhesive that has stood the test of time. The Public know SECCOTINE, and they want it. It is the strongest adhesive in the world. It has no substitute!

You can't afford to be without Seccotine. Another point—it will not deteriorate in stock.

In tubes 4½d., 6d. and 9d.

WATCH OUR NATIONAL ADVERTISING CAMPAIGN
Ask us for free booklets, cutouts, etc. Dept. C. D.
McCAW, STEVENSON & ORR, LTD., BELFAST

There is only ONE SECCOTINE

SIEVES & GAUZES

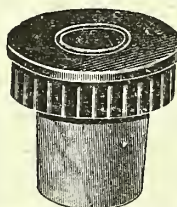
TESTING SIEVES Single & in Sets

FINE MESHES UP TO 320

STEVENS & MANNING
1-3 DISNEY STREET, LONDON, S.E.1
HOP 3536 USIEVEIT—Boro—London

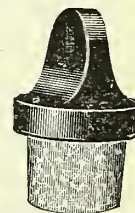
STOPPERS

AND BAKELITE SCREW CAPS



200 Varieties
Any Colour.

A suitable Composition Stopper will enhance the selling value of your package. Let us fit your Bottles and quote you.



T. WEBSTER & Co., Ltd. Telephone: Mountview 052
Diamine House, Middle Lane, Hornsey, LONDON, N.8

AWARD—London, 1881 "For Excellence of Quality"

SYNTHETIC OTTOS "ZINYL" BRAND

"MYSOTYL" (Trade Mark) 12/6 oz.

A new and delightful oriental type of perfume, intensely powerful. "Mysotyl" is also a powerful fixative for other perfumes and one part to 200 parts of Vanishing Cream, Face Powder, Foot Powder, etc., is ample.

"The Synthetic Rose is free from any objectionable smell of Rose Geranium. It is a triumph of synthetic chemistry."

The Chemist & Druggist.

=====

	PER OZ.		PER OZ.
*CARNATION	6/6	OPOPONAX	7/6
CHYPRE	8/6	*ORANGE BLOSSOM ..	7/6
ESS. BOUQUET	7/6	*ORIENTAL OTTO ..	12/6
GERANIUM	5/-	A heavy Eastern type. A beautiful product, absolutely reminiscent of the Far East.	
HELIOTROPE	7/6	*PINK	6/6
HONEYSUCKLE	7/6	ROSE ("Zinyl" Brand) ..	13/6
HYACINTH	7/6	Almost indistinguishable from genuine Otto.	
*JASMIN	8/6	ROSE RED	12/-
JOCKEY CLUB	7/6	Red Rose of Provence.	
LAVENDER	5/-	ROSE WHITE	13/6
LILAC	7/6	SWEET PEA	7/6
LILY OF THE VALLEY	8/6	SYRINGA	7/6
MILLEFLEUR	7/6	VIOLET	10/-
NARCISSUS	8/6	VIOLET de PARME ..	12/6
*NEROLI	7/6	WALLFLOWER	7/6
NEW MOWN HAY	7/6	YLANG YLANG	7/6

CONCENTRATED ESSENCE of EAU de COLOGNE

2 to 4 ounces added to one gallon of spirit 30 over proof makes a splendid perfume for which a prize medal was awarded. 3/6 oz.

=====

H. E. STEVENSON & CO., 122 Great Suffolk Street, LONDON, S.E.1.

Manufacturing Chemists,

Telegrams :
PATERSONS
ABERDEEN

ABERDEEN **BPC** SEPT. 1932

Telephone :
No. 1249
(3 Lines)

WM. PATERSON & SONS (ABDN.), LTD.

Established] **SPRING GARDEN, ABERDEEN** [1838

**EMULSIONS. INFUSIONS.
EMBROCATIONS. OINTMENTS.
SYRUPS. TINCTURES.
DRUGGIST SUNDRIES.
PATENT MEDICINES.**

PROPRIETORS OF

VICTOR'S ESSENCE OF RENNET

AND

"EELIDE," THE BULB STERILIZER

WHOLESALE MANUFACTURING DRUGGISTS.

SEASICKNESS

IS POSITIVELY PREVENTED BY

SEAJOY PLASTER

REGD.

Seajoy Plasters are commanding an ever-increasing demand on account of their efficacy in preventing all forms of Travel Sickness.

A Profitable and Quick Seller.

Retail Price 3/- Wholesale 24/- per dozen.

DISPLAY BOXES.

From all Wholesale Agents or direct from

The "SEAJOY" CO., Putney, S.W.15.

Telephone - - PUTNEY 0414



G. E. THURLEY & SON

Specialists in Liquid Paraffin

UNITY WORKS, LATIMER ROAD, LONDON, E.7

Telephone : Maryland 4685

OLDFIELD, PATTINSON & CO.

Telegrams :
"OPIUM MANCHESTER."

Telephones :
BLACKFRIARS 4682
(2 lines).

**Reliable House for all
Pharmaceutical Preparations
and for Personal Service**

Concentrated
Waters.

Concentrated
Infusions.

Essential
Oils.

OPIUM
B.P. Tinct. Aqueous Tinct.

Liquid
Extracts.

Levigated
Ointments.

Syr. Glycero-
phos. Co.

**"Silver Churn" Dairy Specialities
MANCHESTER**

ENDOCRINE PRODUCTS

"HARROWER"

MADE IN ENGLAND

UNDER the personal supervision of Dr. H. R. Harrower, the well-known "Harrower" Endocrine Tablets are now to be made in England. This will involve the disappearance of the "Sanitabiet," and the commencement of a new style of packing in bottles, with a special device to exclude moisture. This will be known as the "ANHYGROS" package.

¶ The first products to be ready, about the end of June, will be those having the widest use, as follows:—

TABS. ADRENO-SPERMIN Co.

MENOCRIN

(formerly TABS. THYRO-OVARIAN Co.)

NEOLYDIN

(formerly TABS. GONAD Co.)

TABS. ANABOLIN

TABS. PAN SECRETIN

The Medical Profession is being notified by post

ENDOCRINES LIMITED

LABORATORY AND WORKS

WATFORD

HERTS

RAIMES, CLARK & CO., Ltd.

ESTABLISHED 1816.

**Drugs, Chemicals, Galenicals
Malt Extract, Gelatine Capsules
Etc., Etc.**

*Manufacturers of Potassium Iodide, Resublimed Iodine
and Iodine Preparations.*

Proprietors and Manufacturers of

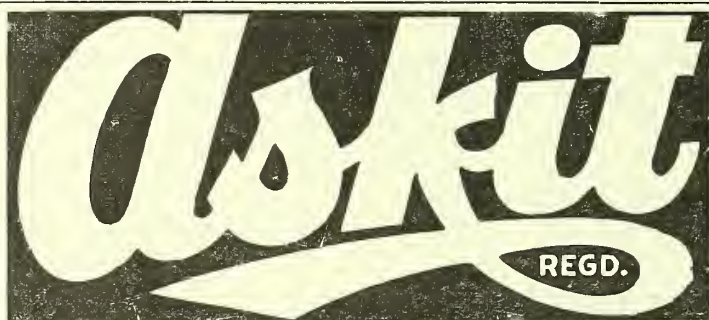
MACLEAN'S REVALENTA

The Perfect Food for Children, Adults and Invalids.

RAIMES, CLARK & CO., Ltd., Manufacturing Chemists and Wholesale Druggists, **EDINBURGH**

Telegrams : "Raimes, Edinburgh."

'Phones : LEITH 893, 894, 895.



POWDERS AND TABLETS FOR HEADACHES, NEURALGIA,
NEURITIS, INFLUENZA, RHEUMATIC AND ALL NERVE PAINS

"ASKIT" POWDERS AND
TABLETS HAVE BEEN
NATIONALLY ADVERTISED
FOR TWENTY-FIVE YEARS

A SOUND SELLING LINE
WITH STEADILY INCREASING
SALES AND A SUBSTANTIAL
MARGIN

FROM ALL WHOLESALERS OR
DIRECT FROM

ASKIT LTD.

MANUFACTURING CHEMISTS
KEPPOCHILL ROAD
GLASGOW

DOLS' VOLATALISE FLANNEL RADIO-ACTIVE

For Rheumatism, Neuritis, Sciatica, Lumbago, Bronchitis, Sore Throats

Dols' Volatalise Flannel is a medicated pure lambs' wool cloth of soft texture, intensely Radio-Active at body temperature, the curative effect thus penetrating to the deeper tissues.

RETAILED IN ANY LENGTH (about 28" wide) at the rate of 14/- per yard.

Boxes - - 1/3 and 3/-. GARMENTS and UNDERCLOTHING from 10/6.

Also KNEE CAPS, BODY BELTS, CHEST AND BACK PROTECTORS, etc.

SOX (to fit any size shoe), The REMEDY for COLD FEET & CHILBLAINS, 1/3 per pair.

New Illustrated Booklet and price List on application.

DOLS' VOLATALISE FLANNEL, Ltd., Viaduct Street, Huddersfield

BEECHAMS PILLS LIMITED

PROCEEDINGS have recently been instituted by **BEECHAM'S PILLS LIMITED** against **WALFOX LIMITED**, manufacturers of medicinal preparations, in consequence of their use and issue of certain leaflets headed :

"The Public Prescription Service Copies of Famous Remedies Walfox Brand"

On an application for an Interlocutory Injunction which came before Mr. Justice Maugham on the 24th day of May, 1932, the Plaintiffs by their Counsel withdrawing any charge of dishonesty against the Defendants, the Defendants gave an undertaking in the following terms :—

- (1) Forthwith to cease to display or issue the leaflets to the public or the Defendants' wholesalers or retailers or any showcard, poster, advertisement or literature reproducing the same.
- (2) To abstain in future in any trade literature displayed or issued by the Defendants to the public or to the Defendants' wholesalers, retailers or servants from using the names "Beecham's Pills" or "Beecham's" except in connection with the sale of the Plaintiffs' goods, provided that if the Plaintiffs advertise the fact of this settlement having been arrived at, the Defendants shall not be precluded under the foregoing terms of the judgment from replying to such advertisement and in so doing using any of the said names.
- (3) Upon oath of their proper officer to deliver up to the Plaintiffs or destroy all leaflets, posters or other trade literature use of which would be a breach of the aforesaid undertakings of either of them.
- (4) To send to their wholesalers or retailers a circular letter containing the terms of a draft initialled by Counsel.

It was further ordered that the Defendants should pay to the Plaintiffs their costs of the Action to be taxed by the Taxing Master.

Proceedings were also taken by **Beecham's Pills Ltd.** in regard to the use by **Melias Limited** of the leaflets above referred to, and upon a Motion for an Interlocutory Injunction which came before Mr. Justice Maugham on the 24th day of May, 1932, the Defendants submitted to a perpetual Injunction in the following terms :—

That the Defendants, their servants and agents be restrained

- (a) From infringing the Plaintiffs' registered Trade Marks "Beecham's Pills," No. 52721, in Class 3, dated 6th April, 1886, and "Beecham's," No. 508487, in Class 3, dated 5th December, 1929.
- (b) From passing off or issuing or printing the printed matter calculated to cause the passing off of the Defendants' goods as and for the goods of the Plaintiffs.
- (c) From displaying, issuing or using the leaflet or any showcard, advertisement or literature reproducing the same.

It was further ordered that the Defendants should forthwith upon oath of their proper officer deliver up to the Plaintiffs or destroy all advertisements, leaflets and other printed matter, the use of which would be a breach of the said injunction. And it was further ordered that the Defendants should pay the Plaintiffs their costs of the Action down to and including the judgment, such costs to be taxed by the Taxing Master.

NOTICE is hereby given that proceedings will immediately be taken against any person using the Trade Marks referred to in the manner complained of in the above-mentioned proceedings.

BLACKWELL, HAYES & CO., LTD.

FOR
50 YEARS
Specialists in
Flavours

Fruit Essences
and
Harmless Colours

Bulk or Packed

ALL PRODUCTS GUARANTEED
TO CONFORM TO THE FOOD
AND DRUGS ACT

SCAT Spray INSECTICIDE

For FLIES & SUMMER PESTS

	Wholesale.	Retail.
1 gallon tins	10/-	15/- each
½ gallon tins	4/6	8/- "
2 pint tins	3/-	4/6 "
1 pint tins	1/10½	2/6 "
8 oz. bottles	1/-	1/6 "
SPRAYS	1/6	2/- "

Free Containers. Carriage Paid.

Large quantities are being sold
through other trades.

This should be YOUR line

FEATURE

one of the

**Blackwell, Hayes
Series**

of

**Own Name Packed
Goods**

*Attractively packed at
competitive prices.*

SPECIAL RANGE OF CONCENTRATED MIXTURES MADE TO PROVED EFFICIENT FORMULAE

MOOR ST. AND ALBERT ST., BIRMINGHAM

'Phone : Central 1267.



Wires, Blackwelaze, Birmingham.

LOSALL'S SALT

SELLS FREELY AND READILY.
PAYS 50% ON OUTLAY.

An infallible remedy for

**Gout
Rheumatism
Eczema & Skin
Affections**

P.A.T.A. doz. net

4 oz. tins 1/-, 8/-

8 oz. ,, 1/9, 14/-

Bottles 2/-, 16/-

Attractive advertising
matter supplied on
application.

SOLD EVERYWHERE.



Manufactured by
LOFTHOUSE & SALTMER, Ltd.
HULL.

A powerful
summer appeal—
the Cromessol
disinfectant spray—
6 times more
germicidal than
Carbolic—
fragrant as flowers—
cool as
a breeze

"Why didn't you tell me
it smelt so nice?"



CROMESSOL
FRAGRANT DISINFECTANT

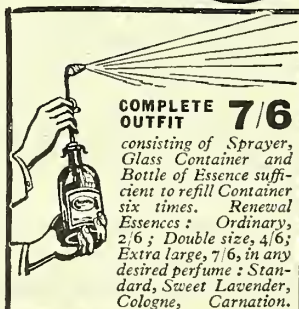
TERMS

Less 30%

with cash discount of 5%
1 month, on orders of £1
nett and over.

Carriage paid on orders
of £2 nett and over.

THE CROMESSOL CO.
140-8 Brand Street, Ibrox,
Glasgow, S.W.1



'Roche' Products

' ROCHE ' PRODUCTS

are obtainable
by the Trade
from us direct
or through
the usual
wholesale
houses.



Emergency
supplies at any
hour of day
or night from
**John Bell &
Croyden**
Wigmore St., W.1
who hold
complete
stocks

Main Entrance to the Laboratories, Offices, etc.,
51 Bowes Road - - LONDON, N.13.

'ALLONAL,' 'DIGALEN,' 'ISACEN,'
'OMNOPON,' 'SEDOBROL,' 'OVOBROL,'
'SEDORMID,' 'SOMNIFAINE,' 'TUBUNIC,'

are some Trade Mark names of Products issued by

THE HOFFMANN-LA ROCHE CHEMICAL WORKS LTD.

Telephone : { 2826
Palmer's Green { 2827

Telegrams :
"HOFROCHE, PALM, LONDON"

51 Bowes Road - - - LONDON, N.13

Your biggest price margin — definitely on British SUGAR OF MILK

Low-priced and all-English. Serolac is the new brand of Sugar of Milk.

Because Whey Products Limited, who make it, are the only manufacturers of Sugar of Milk in the country, they are still able to sell on a level with the cheapest foreign competitor.

Compare these prices

Sugar of Milk (Serolac Brand) is packed in $\frac{1}{4}$, $\frac{1}{2}$ and 1 lb. tins, attractively labelled and selling at trade terms of—

1 lb. tins	-	-	15/- a dozen.
$\frac{1}{2}$ lb. tins	-	-	8/- a dozen.
$\frac{1}{4}$ lb. tins.	-	-	4/9 a dozen.

Carriage forward.

Compare these low prices with what you

now pay, and see the substantial extra profit from buying Serolac—and British.

If you prefer, supplies will be forwarded in blank tins for you to label with your own name and design.

Serolac Sugar of Milk is extracted, refined and sold by Whey Products Ltd., Haslington, Cheshire. Head Office: Trowbridge, Wilts.

Sugar of Milk in bulk

Sugar of Milk (Serolac Brand) in bulk is packed in 1 cwt. and 2 cwt. Venesta kegs lined with grease-proof paper. Carriage paid quotations are gladly supplied on request.

SUGAR OF MILK (SEROLAC BRAND)

"KILLGERM"
THE PERFECTION OF
DISINFECTANTS

FLUIDS (BLACK & WHITE)
POWDERS, SOAPS
FUMIGATORS ETC.

SEND YOUR ENQUIRIES TO
THE "KILLGERM" CO. LTD.
CLECKHEATON, YORKS.



CACHETS "FINOT"

(White or Coloured)

With inscriptions in any desired tint; also Plain or Embossed.

"A distinction all their own."—C. & D.

"Perfection of Cachets."—Lancet.

These Cachets are especially adapted for Headache, Neuralgia and other powders.

COOPER SON & CO. LTD., 80 Gloucester Road, SOUTH KENSINGTON.
In 17 Sizes to fit the various types of Cachet Machines.

IONIZED IODINE

(MOLSON BRAND)

Obtainable from the usual wholesalers or the makers

MOLSON IONIZED IODINE CO. Ltd.

34 C, GABRIEL'S HILL, MAIDSTONE

NURSE HARVEY'S MIXTURE

A safe, simple and reliable remedy for Children's Ailments is advertised so extensively in the daily and weekly Press as to bring mothers to the retailer without effort on his part.

The selling has been done before the mother reaches the chemist, and, having supplied her, it is only common sense to claim she will buy other family necessaries from him. Moreover, the continuous demand for it produces a quick turnover.

For Direct Terms apply to—

OSCAR SCRUTON & CO., YORK

"SAL ALTERATA"

PPROMOTES active metabolism, facilitates the elimination of waste products, stimulates the activity of the liver and kidneys and by overcoming constipation re-establishes the natural habit of defæcation.

URIC ACID ELIMINANT

Possesses valuable antiarthritic, diuretic and laxative Properties.

FORMULA :

One hundred parts represent :

Strontium Lactate, 0.30 ; Lithium Citrate, 0.15 ; Caffeine Citrate, 0.03 ; Quinine Phosphate, 0.06 ; Sodium Benzoate, 0.23 ; Sodium Formate, 0.08 ; Calcium Lactophosphate, 0.15 ; Sodium Sulphate, 30.00 ; Magnesium Sulphate, 8.00 ; Potassium-Sodium Citro-tartrate, 61.00.

Directions :

FOR CONSTIPATION

One tablespoonful in a glassful of warm or cold water before breakfast and at bed-time.

FOR GOUT, RHEUMATISM, TOXÆMIC HEADACHE, ETC.

Two teaspoonsful in a tumblerful of water, repeated every three hours.

FOR RENAL INACTIVITY, CYSTITIS or INCONTINENCE

One teaspoonful in a tumblerful of water three hours after each meal and at bed-time.

Price : 3/- per Bottle. 24/- per doz.

Manufactured by

WYLEYS LIMITED, COVENTRY

ESTABLISHED 1750



PHARMACEUTICAL PRODUCTS

issued under the following Trade Marks or Brands in Original Packings as under:

'COMPRAL'

gr. $7\frac{1}{2}$ (0.5g.) tablets in tubes of 10 and bottles of 50 and 250.

'ADALIN'

Cartons, $\frac{1}{2}$ -1 oz. Tablets, gr. 5, bottles of 25 and 100; gr. $7\frac{1}{2}$, tubes of 10.

'NOVALGIN'

Bottles of $\frac{1}{2}$ -1 oz. Tablets, gr. $7\frac{1}{2}$, tubes of 10 and bottles of 50 and 250.

'ELITYRAN'

gr. $\frac{2}{3}$ (0.025g.) in tubes of 30, and bottles of 250.

'PHANODORM'

gr. 3 tablets, tubes of 10 and bottles of 50 and 250.

'PYRAMIDON'

The Original Product. Cartons, $\frac{1}{2}$ -1 oz. Tablets, gr. $1\frac{1}{2}$ and 5.

'THEOMINAL'

Tablets in tubes of 20 and bottles of 50 and 250.

'LUMINAL' and

'LUMINAL' SODIUM

The Original Product. Cartons and bottles of $\frac{1}{2}$ -1 oz. Tablets, gr. $\frac{1}{4}$ to 5.

'LACARNOL'

In drop bottles of 20 c.c. and 125 c.c. Boxes of 5×1 c.c. ampoules.

PRICE LIST ON REQUEST

BAYER FINE CHEMICALS

ACETYL SAL. ACID

AMIDOPYRIN

BARBITONE

BENZONAPHTHOL

METHYL SALICYLATE

HEXAMINE

PHENACETIN

SODIUM SALICYLATE

PHENAZONE

RESORCIN

SULPHONAL

DETAILS FROM

BAYER PRODUCTS Ltd., 19 St. Dunstan's Hill, London, E.C.3

Telephone : ROYAL 6701/4.

Telegrams : "BAYAPROD, PHONE, LONDON."

Notable B.D.H. Medical Products



LIVER EXTRACT
GASTER SICCATATA
LIVOGEN
PITUITARY EXTRACT
INSULIN 'A. B.'
ERGODEX
ELIXIR OF EPHEDRINE
CHLOROFORM PURISS
SANUSIN "SEMPULES"
AETHER PURISS

Some Popular

All in
regular
demand



B.D.H. Products

Especially
during the
Summer months



4 B.D.H. VITAMIN PRODUCTS

AVOLEUM

Standardised Vitamin A

RADIOSTOL

Crystalline Vitamin D

RADIOSTOLEUM

Standardised Vitamins A & D

RADIO-MALT

Standardised Vitamins
A B₁ B₂ & D





Liquid LIVER EXTRACT



One Fluid ounce is equivalent to
8 ozs. of fresh liver

		Retail Price		Trade Price
4 oz.	- -	6/6	-	51/- per doz.
8 oz.	- -	11/6	-	93/- „ „
16 oz.	- -	21/-	-	168/- „ „
80 oz.	- -	—	-	65/- each

*Shows a handsome profit
to the trade*

JAMES WOOLLEY
SONS & Co. Ltd
VICTORIA BRIDGE, MANCHESTER

W.26

ESTABLISHED 1751

WILLOWS, FRANCIS, BUTLER & THOMPSON
Limited

Wholesale & Export Druggists
Manufacturers of Pharmaceutical Preparations

ENQUIRIES INVITED FOR

WILLOWS' **GALENICALS**

*Made from Chemically and Physiologically
tested Drugs*

**73, 75 & 89^a Shacklewell Lane,
Dalston, London, E.8**

TELEGRAMS: "FORTY, KINLAND, LONDON."

TELEPHONE: CLISSOLD 6361 (4 lines)

VENO DRUG CO. (1925) LTD.

PROCEEDINGS have recently been instituted by **VENO DRUG COMPANY (1925) LIMITED** against **WALFOX LIMITED**, manufacturers of medicinal preparations, in consequence of their use and issue of certain leaflets headed :

“The Public Prescription Service Copies of Famous Remedies Walfox Brand”

On an application for an Interlocutory Injunction which came before Mr. Justice Maugham on the 24th day of May, 1932, the Plaintiffs by their Counsel withdrawing any charge of dishonesty against the Defendants, **the Defendants gave an undertaking in the following terms :**

- (1) Forthwith to cease to display or issue the leaflets to the public or the Defendants' wholesalers or retailers or any showcard, poster, advertisement or literature reproducing the same.
- (2) To abstain in future in any trade literature displayed or issued by the Defendants to the public or to the Defendants' wholesalers, retailers, or servants from using the names “Cassell's Tablets,” “Veno's Lightning Cough Cure” or “Germolene” except in connection with the sale of the Plaintiffs' goods provided that if the Plaintiffs advertise the fact of this settlement having been arrived at, the Defendants shall not be precluded under the foregoing terms of the judgment from replying to such advertisement and in so doing using any of the said names.
- (3) Upon oath of their proper officer to deliver up to the Plaintiffs or destroy all leaflets, posters or other trade literature use of which would be a breach of the aforesaid undertakings or either of them.
- (4) To send to their wholesalers or retailers a circular letter containing the terms of a draft initialled by Counsel.

It was further ordered that the Defendants should pay to the Plaintiffs the sum of £50 as agreed damages, together with their costs of the Action to be taxed by the Taxing Master.

Proceedings were also taken by **Veno Drug Company (1925) Limited** in regard to the use by **Melias Limited** of the leaflets above referred to and upon a motion for an Interlocutory Injunction which came before Mr. Justice Maugham on the 24th day of May, 1932, the Defendants submitted to a perpetual Injunction in the following terms :

That the Defendants, their servants and agents be restrained

- (a) From infringing the Plaintiffs' registered Trade Marks “Germolene,” No. 348726, dated 14th January, 1931 ; “Cassell's Tablets,” No. 514210, dated 2nd July, 1930 ; and “Veno's,” No. 510641, dated 25th February, 1930, all registered in Class 3.
- (b) From passing off or issuing or printing the printed matter calculated to cause the passing off of the Defendants' goods as and for the goods of the Plaintiffs.
- (c) From displaying, issuing or using the leaflet or any showcard, advertisement or literature reproducing the same.

It was further ordered that the Defendants should forthwith upon oath of their proper officer deliver up to the Plaintiffs or destroy all advertisements, leaflets and other printed matter, the use of which would be a breach of the said injunction. And it was further ordered that the Defendants should pay the Plaintiffs their costs of the Action down to and including the judgment, such costs to be taxed by the Taxing Master.

NOTICE is hereby given that proceedings will immediately be taken against any person using the Trade Marks referred to in the manner complained of in the above-mentioned proceedings.

THE FINEST OINTMENTS ARE

SPUN

(Regd. Trade Mark)



OF COURSE!

PRICES OF BULK AND PACKED OINTMENTS
UPON APPLICATION.

ALL DRUGS AND PACKED
MEDICINAL AND TOILET LINES

MANUFACTURERS OF
"LAXAGAR" EMULSION
"VUNDI"

PEROXIDE OF HYDROGEN
"VUNDI" LYSOL ETC., ETC.

ROBERT BLACKIE

SHEN WORKS,
TOWER BRIDGE RD.,
LONDON, S.E.1

Telephone: HOP 2422

Telegrams:
"USHENSPUNA.
LONDON."

CUSTOMER'S OWN FORMULÆ MADE AND "SPUN"

BURROUGH'S

TRY THE EXTRA RECTIFIED
FOR YOUR PERFUMERY

SVR

FOR YOUR TINCTURES

AND

ABSOLUTE ALCOHOL

DUTY PAID
and
DUTY FREE
for
EXPORT
and
SCIENTIFIC
PURPOSES.

"QUINTA REAL" ELEGANT OLD TAWNY PORT.

Burrough's Invalid Port.
Ports for Medicating Purposes.

"DONZARDO" SHERRY—
DELICATE PALE DRY.

Sherry for Ipecac. Wine.

Lime Juice Cordial.

BRITISH SHERRY.

"Bourg Freres" Champagne, in
Botts., $\frac{1}{2}$ -Botts., and $\frac{1}{4}$ -Botts.

ORANGE WINE B.P.

Orange Quinine B.P.

Lemon Squash.

"BELL BIRD"

AUSTRALIAN WINES.

British Ruby and Tawny—Port Style.

"BEEFEATER" Gin—Purest and Best

"WHITE CROSS" WHISKY, BRANDY
and RUM

Write for Samples and Quotations, stating if you hold a Wine Licence.

JAS. BURROUGH Ltd. 37 Cale Distillery,
Lambeth, S.E.11

Telegrams: "Burrocale, Phone, London." Estab. at Chelsea 1820. Telephone: Reliance 1166

TO WHOLESALE & EXPORT TRADES

WILLIAM RANSOM & SON, LTD.

MANUFACTURING CHEMISTS

HITCHIN Near London

ESTABLISHED SINCE 1846

for

**SOLID AND LIQUID
MEDICINAL
PREPARATIONS**

in bond and duty paid

**EXTRACTS
OLEO-RESINS
RESINOIDS
RESINS**



Telephone, 95 Hitchin; Telegrams, "Ransoms, Chemists, Hitchin"
Codes, 5th Edition, A.B.C., and Bentleys

Without Question the cheapest delivery proposition on the road

Take any item you like, for example, tax, driver's wages, insurance or running costs—the Raleigh shows a tremendous saving that you cannot afford to neglect.

Astonishing value at only £78 15s. fully equipped, the Raleigh is one of the smartest, safest and most efficient motor vans on the road—a splendid advertisement, a means of giving tip-top service to your customers and reducing usual motor delivery costs by HALF! It is smooth running, speedy and easy to control; can be driven by a lad of 16; does 50-60 miles per gallon of petrol and has larger space for goods than any 5-cwt. vehicle. Expand your business with the Raleigh.

£78 . 15s.

(Ex Works)

EASY PAYMENTS
ARRANGED

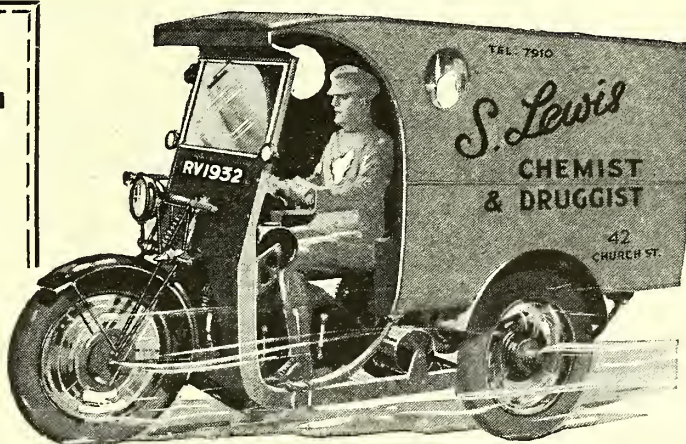
TAX . . . £4

INSURANCE

(3rd Party)

FROM . . £3

Special features of the Raleigh include powerful engine with automatic lubrication; pressed steel chassis; 3-speeds forward and REVERSE; Car-type DIFFERENTIAL REAR AXLE, DETACHABLE and INTERCHANGEABLE WHEELS. Fully equipped with electric lighting and screen wiper, horn, driving mirror, safety glass screen, jack and kit of tools.



THE NEW
RALEIGH
5-CWT. VAN

DEMONSTRATIONS FREE ON YOUR OWN ROUND

There is a Raleigh distributor in every important centre who will prove the efficiency of the Raleigh Van under your own working conditions. Send for list C.D. 26 and arrange a free trial

THE RALEIGH CYCLE CO. LTD., NOTTINGHAM (Manufacturers of the famous All-Steel Bicycle)

Sole London Distributors: FRANK WARING LTD., 100 Great Portland Street, W.1.

Tel.: Museum 0947

200,000 RECRUITS TO THE FLIT ARMY since last June!

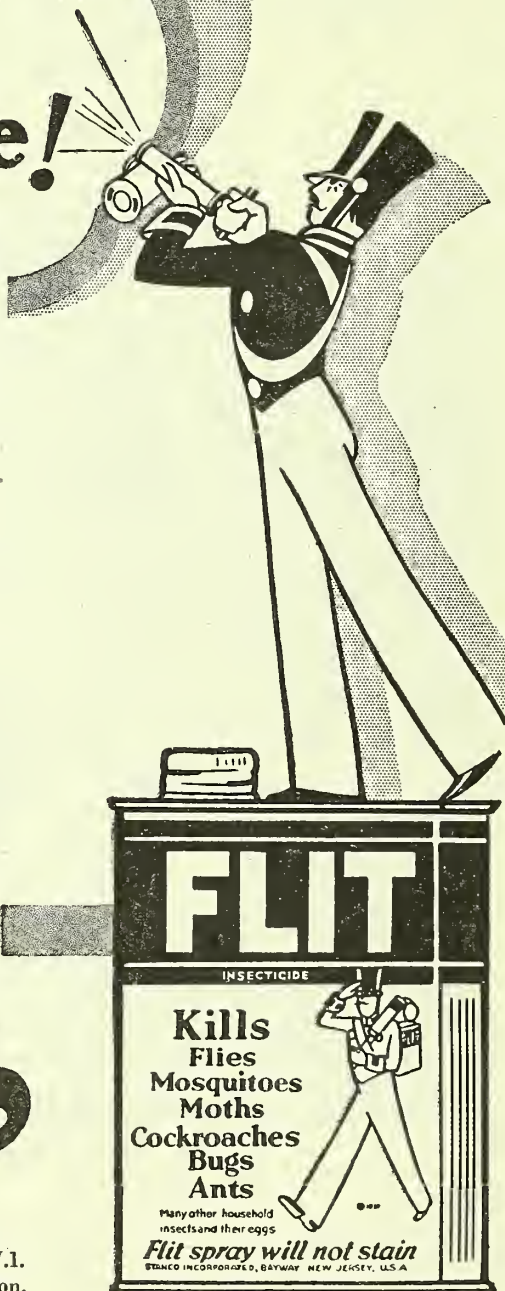
200,000 additional buyers acknowledging Flit as the most effective insecticide. 200,000 more homes equipped with Flit sprayers—needing further supplies of Flit for this approaching season.

National Advertising will urge these thousands to use more and more Flit in 1932. It will bring many thousands more into the ranks of the Flit Army.

For your part, have stocks in readiness. Have Flit displayed in your windows to bring in a goodly share of this bigger business.

FLIT SELLS

STEMCO, LTD., 128, ALBERT STREET. CAMDEN TOWN, N.W.1.
Telephone: Gulliver 5474. Telegrams: Nufinjol, Norwest, London.



Exporters ! Manufacturers !!

YOUR Export Printing is of vital importance ; on it may depend the success or failure of your venture. English Catalogues are worthless for Foreign Markets : the buyer requires literature in the language he can understand.

Printing in Foreign Languages is **not expensive** if you deal direct with the House possessing the necessary types. A few specimens of the types in use in our works are here shown.

Japanese.

一くのはに型
要べ商こて録
件か取水發せ
なら引外行外
ク 上國す國
。る欠とる話

- Catalogues in the Vernacular are a necessity for Foreign Markets.
- Translations into all Languages undertaken if required.
- Specimen Book of Types and Estimates Free on Application.
- Technical and Scientific Works a Speciality.
- Printers to the late East India College and to the leading learned Societies.

Chinese.

目用在
表本外
不地國
可話市
。之場
價非

Arabic.

كتالوجات مكتوبة باللغة الوطنية ضرورية للأسواق الخارجية

Gujerati.

પરદેશી આગરો માટે સ્વદેશી ભાષામાં રચેલી ડીપોની જરૂર પડે છે.

Hebrew.

קטלוגים בשפות המתלכות הם הכרחיים לזרך השוקים בארצות נכריות

Nagari.

इर देश में सब सचि तब और तिखनामे उस देश की भाषा में छप्पाने चाहिये

Polish.

Albowiem tak Bóg umiłował świat, że Syna swego jednorodzonego dał, aby każdy, kto weń wierzy, nie zginął, ale miał żywot wieczny.

Russian.

Каталоги для внешних рынков должны быть печатаны на родном языке.

Siamese.

ແຄດລະລືອກ ພິມພ໌ ເບນ ກາຊາໄທຍ ຈື່ແປນ ສຳຫຼັບ ທາຣ ດ້າ ຂາຍ ຂອງ ດ້າວ ປະເທດ

Spanish.

Stephen Austin & Sons, Limited, son especialistas en la impresión de las lenguas orientales y extranjeras, produciendo obras impresas literarias y comerciales de clase superior a precios módicos.

Urdu.

هرملك ميں سب فہرستیں اور نرخ نامہ ملك کی زبان ميں چھاپنے چاہئیں۔

STEPHEN AUSTIN & SONS, LTD.

Oriental and General Printers

FORE STREET = = HERTFORD, HERTS

Another GALEN PRODUCT

*Blackcurrant Juice
Pastilles with Glycerine*



IN 4-OZ. TINS
AT 1/- RETAIL

This Galen Pastille
soothes tired throats.
It is a blending of Black-
currant Fruit and Glycerine.

It is welcomed by reason of its agreeable flavour,
efficacy and convenient purchase price of 1/- per tin.

Supplied in display cartons of 6 tins; from your whole-
saler or the Sole Selling Agents.

GALEN PRODUCTS



REGD TRADE MARK

Manufactured by THE GALEN PRODUCTS CO., LTD., STOCKPORT.

Sole Selling Agents: THOMPSON & CAPPER WHOLESALE LTD.,
Manesty Buildings, College Lane, LIVERPOOL.

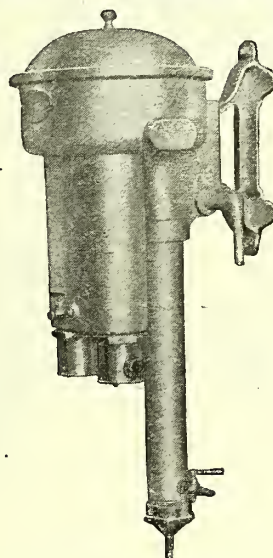
**NOW ALL
BRITISH**

STOKES AUTOMATIC WATER STILLS

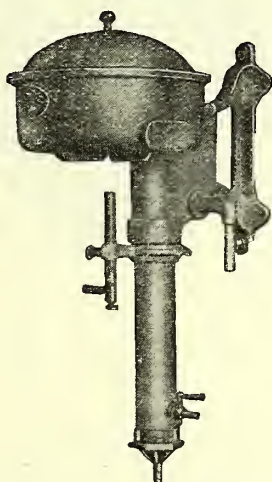
Stokes Automatic Water Stills are now being manufactured by us (by arrangement with the F. J. Stokes Machine Co.) and are British made throughout. For efficiency and economy they hold the lead.

For 27 years we have been the Sole Agents for the F. J. Stokes Machine Co., but now we are the actual manufacturers.

There is a wide range of sizes of Stokes Stills, the heating methods including gas, paraffin, electricity, and steam. The largest Stills have an output of 60 gallons per hour. Full particulars sent immediately on receipt of a postcard.



"00" Still, Electric.
Output, 1 gallon per hour.



"0" Still, Gas.
Output, 3 pints per hour.

DESCRIPTION AND OUTPUT OF OTHER STILLS ARE AS FOLLOWS:—

000 Gas	-	-	-	-	2 Gallons per Hour.
000 Steam	-	-	-	-	2 " "
1	"	-	-	-	5 " "
2	"	-	-	-	10 " "
3	"	-	-	-	25 " "
4	"	-	-	-	60 " "
5	"	-	-	-	100 " "
00 Electric	-	-	-	-	1 Gallon "
000	"	-	-	-	3 Gallons "

The No. 0 Still is also supplied with a Primus stove should gas not be available.

On receipt of a postcard we will gladly send full details and particulars.

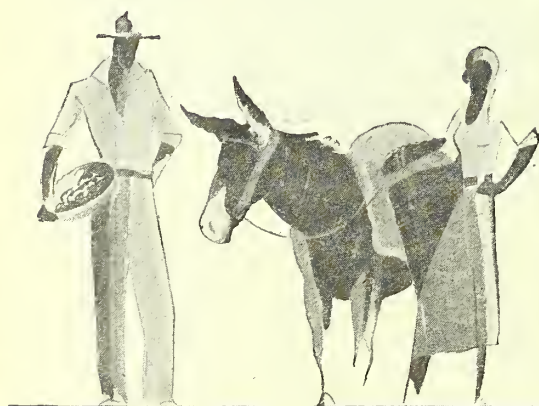
THOMPSON & CAPPER WHOLESALE LTD.
MANESTY BUILDINGS
COLLEGE LANE
LIVERPOOL

Telegrams :
 "Sanitas," Liverpool

Telephone :
 Royal 2060

SASSO

olive oil



All over the world the name "SASSO" stands for what is best in Olive Oil. Doctors recommend it. Stock it and give customers confidence in your products. Write for New Season's samples and Price Lists, together with particulars of new advertising scheme.

Sole Agents for United Kingdom:

FREDK. BOEHM LTD.
17 JEWRY STREET, LONDON, E.C.3

Producers:

P. SASSO & FIGLI
ONEGLIA - - - - ITALY



First-class First-Aid for Motorists

Recently published official figures show:

1. An increased number of persons injured in road accidents over the previous year;
2. That the number of accidents reaches its peak in August.

Every motorist, in his own interest, should carry first-aid equipment

Make a topical display of

TRADE
MARK

'TABLOID' BRAND FIRST-AID

Typical example—

'TABLOID' FIRST-AID, No. 715

A compact and comprehensive outfit containing emergency requirements of the highest quality. Contents include 8 tubes of 'Tabloid' and 'Soloid' products, 'Tabloid' Bandages and Dressings, 'Vaporole' Iodine Tincture, 'Vaporole' Aromatic Ammonia (for use as "smelling salts"), 'Borofax' Boric Acid Ointment, 'Carofax' Solidified Carron Oil, Sal Volatile, etc.



'TABLOID' FIRST-AID, No. 715

Size: $7\frac{1}{8} \times 4\frac{1}{2} \times 2$ in.

Price in London to the Trade—25/0
(subject)

For full range of 'Tabloid' First-Aid Outfits, see Price List



BURROUGHS WELLCOME & CO.
LONDON

THE CHEMIST AND DRUGGIST

A Weekly Journal of Pharmacy, the Drug, Chemical and Allied Trades

*The official organ of The Pharmaceutical Society of Ireland,
The Chemists' and Druggists' Society of Ireland, and of
other Chemists' Societies in Overseas Dominions*

ANNUAL SPECIAL ISSUE 1932

PUBLISHED AT

28 ESSEX STREET, STRAND, LONDON, W.C.2

Telegrams: "Chemicus, Estrand, London"

Telephone: Central 6565 (8 lines)

BRANCH OFFICES

4 CANNON STREET, MANCHESTER (TEL.: BLACKFRIARS 3052)
19 WATERLOO STREET, GLASGOW (TEL.: CENTRAL 2329)

54 FOSTER'S BUILDINGS, HIGH STREET, SHEFFIELD (TEL.: 22458)
99 QUEEN STREET, MELBOURNE, AUSTRALIA

VOL. 116. NO. 2733

CONTENTS

JUNE 25, 1932

	PAGE
ABERDEEN	704
Births	727
BRITISH DRUG HOUSES, LTD.	730
Business Changes ..	691
Correspondence:—	
Letters	753
Legal Queries	754
Miscellaneous In- quiries	754

	PAGE
Deaths	727
Editorial Article:—	
A Varied Feast ..	729
ETRUSCAN AND ROMAN PERFUMERY	746
Gazette	692
Irish Notes	690
INDUSTRY IN SCOTLAND	711
JUGOSLAV PHARMA- COPEIA	744

	PAGE
Legal Reports	692
New Companies and Company News	692
NEWFOUNDLAND COD- LIVER OIL	742
News of the Week ..	689
Personalities	727
PHARMACY AND THE APOTHECARY IN SCOT- LAND	695

	PAGE
Retrospect	754
SCOTTISH COD-LIVER OIL	740
Scottish Notes	690
Sporting Events	690
Summer Outings	691
Topical Reflections ..	691
Trade Marks	752
Trade Notes	727
Trade Report	751

News of the Week

The Surgical and Allied Trades Association

The fourth annual general meeting of the Surgical and Allied Trades Association was held recently at 80 Fenchurch Street, London, E.C.3. The chairman (Mr. Mark C. Rimmer), in his report, reviewed the position of the trade and commented upon the difficulties of carrying on business with continual changes in import duties which were taking place. The following officers were elected for the ensuing year:—Chairman, Mr. Mark C. Rimmer; Vice-Chairman, Mr. Vivian L. Hatrick; Hon. Treasurer, Mr. H. A. Berens; Hon. Auditor, Mr. J. Mortimer; Executive Council, Messrs. Chas. Boulter, H. W. Bush and A. Searle.

Inquests

At Bristol, on June 20, on the body of John Stanley Roberts, it was stated by a medical witness that when Roberts was admitted to hospital in 1929 he was taking 18 gr. of morphine a day. The quantity was gradually reduced. Roberts died from heart disease due to taking morphine. A verdict in accordance with the medical evidence was returned.

A verdict of "Suicide while of unsound mind" was returned at a recent inquest at Leek, on the body of Arthur Mycock, farmer, Bradnop. A *post-mortem* examination revealed that the deceased had taken a large dose of strychnine, 6.88 gr. being found in the organs. The coroner said it was curious one could not trace in Leek any purchase of the poison, but perhaps chemists were sometimes slack in registering in their book, and the fact that it was not registered was not conclusive evidence he did not buy it. He might possibly have got it from another farmer.

Birmingham Garden Party

The garden party in aid of the Society's Benevolent Fund, given by Mr. and Mrs. J. W. Atkinson at their residence on June 15, was a great success; the weather was fine and the attendance numbered 100. Games and



A HAPPY THOUGHT

competitions, for which a charge was made, went on from 3 p.m. to 7 p.m., and several friends sent donations. As Mrs. Atkinson provided tea and defrayed other expenses, the whole of the proceeds (£27) will be given to the Fund.

Sheffield

During the last month there has been a large increase in Public Assistance dispensing.



To facilitate the delivery of letters the postal area has been divided into sections, each of which has been given a number to be placed after the name of the city.

Miscellaneous

THEFT.—While Mr. J. S. Norrie, chemist and druggist, Southborough, Tunbridge Wells, was obtaining from a storeroom an article asked for by a customer recently, the contents of the till and a cash box were stolen.

IN THE COURTS.—In Shoreditch County Court, London, on June 14, James Shears, Radnor Street, E.C., a machine worker, made a claim at the rate of 22s. 6d. a week, under the Workmen's Compensation Act, against J. Maud & Co., Ltd., tablet manufacturers, New North Road, N.; he was awarded compensation at the rate of 15s. 6d. a week. The respondents offered to take the applicant back as a packer.

IRREGULAR RECORDS.—At Crediton, on June 15, Mr. Herbert Charles Porter, veterinary surgeon, was summoned for having failed to comply with the Dangerous Drugs (Consolidation) Regulations, 1928, in respect of a purchase of 12 gr. of cocaine obtained from Jackson & Son, chemists, High Street, on March 17, and in regard to "dangerous" drugs obtained on five other occasions. The defendant, who pleaded "Guilty," stated in the witness-box that he had been practising in England only about three years, having previously been in Canada, where the law was quite different. He did not know there was any need to keep a record of how he used or disposed of such drugs. The presiding justice said the Bench considered it a very serious case, but had no desire to impose a heavy penalty. A fine of 5s. on each of the six charges was imposed.

Irish Notes

Brevities

Kilkenny Corporation has expressed its sympathy with Mr. Michael Mahony, Ph.C., on the death of his father.

When H.M.S. "York" arrived at Newcastle, co. Down, on June 14, Mr. Robert Hastings, J.P., Ph.C. (chairman of the Urban Council) welcomed the officers and men.

At Strabane Quarter Sessions, on June 16, the executors of the late Mr. James Hill, Ph.C., sued Dr. Charles Brannigan, Strabane, to recover the sum of £41 9s. 9d., alleged to be due for goods sold and delivered. Mr. Elliott, for the defence, pleaded the Statute of Limitations, with the result that a decree for 9s. was given.

At Londonderry, on June 17, Robert Allison, a commercial traveller, who was arrested in Belfast on a charge of embezzling, between the years 1929 and 1932, sums amounting to £500, the property of his employer, Mr. Thomas Blair (trading as John Mortimer & Co., druggists, Foyle Street), was again before the Court. Evidence was given in five cases, and the accused was further remanded.

Belfast

The annual outing of the staffs of J. & J. Haslett, Ltd., Belfast and Dundalk, was held recently to Portrush. A hearty vote of thanks to the directors was passed, and, in reply, Mr. H. R. Haslett paid a tribute to the loyalty and enthusiasm of the staff.

A meeting of the Committee of the Chemists' and Druggists' Society of Ireland was held on June 9, Mr. Fred Storey (president) in the chair. Mr. S. Gibson (treasurer) and Mr. James Macauley (secretary) were also present. Letters were read from Mrs. W. McMullan, Mr. Ardis and Mr. R. D. Anderson thanking the Society for letters of sympathy. Congratulations were offered to Mr. Macauley on the honour conferred on his cousin, the Reverend J. J. Macauley, D.D., Rathgar, Dublin, who was appointed moderator of the General Assembly. It was decided to hold the annual picnic on June 29, by motor-coach to the Silent Valley.

Scottish Notes

Aberdeen

Dr. E. G. Bryant, head of the Pharmacy Department of Robert Gordon's Colleges, has issued a circular letter explaining his reasons for accepting nomination for the North British Executive. Dr. Bryant, who has been teaching pharmaceutical subjects for nearly twenty-two years, points out that at present there is no scholastic representative on the Executive.

The Aberdeen Pharmaceutical Association held its quarterly meeting on June 7. The opportunity was taken of presenting the prizes won by the evening class students at the Association's recent examinations. Besides a good attendance of members there were fully fifty students present, to whom the president (Mr. M. K. Watt) extended a cordial welcome. The president also welcomed Dr. Campbell (Professor of Materia Medica in Marischal College), who gave an interesting address on recent developments in medical science. Mr. Charles Simpson proposed a cordial vote of thanks to Dr. Campbell. Mr. Mutch (convener of the Education Committee) and Dr. Bryant (head of the Pharmacy Department) gave accounts of the work done at the examination. Mr. Donald Morrison, one of the prizemen and the winner of the Petrie Trust bursary, thanked the members of the Association for the interest they continued to show in the work of the students. The following were the prize-winners:—Stage 1, Wm. Marr, Patricia Cranna, J. P. Robertson and L. B. Allan. (2) Agnes Birnie, James Kidd, W. A. Michie and A. Simpson. (3) P. J. Morrison, Ian Robson, A. Glennie and Victor Bond. (4) Donald Morrison and W. S. Taylor.

Brevities

T. & H. Smith, Ltd., manufacturing chemists, have subscribed £5 5s. to the Development Board for Glasgow and District.

The annual pairs competition of the Scottish Chemists' Bowling Association, for the D. & W. Gibbs trophy, will take place on Albert Place bowling green, Stirling, on June 29. The draw will take place about 10 a.m. Lunch will be served in the club house about 12.30, and high tea in Golden Lion Hotel about 5.30 p.m.

Sporting Events

MEMBERS of the bowling section of the Glasgow Pharmacy Club held their second game of the season on Wellcroft bowling green on June 14 for the Cartwright trophy. The winners were as follows:—Messrs. J. G. McMaster, J. S. Anderson, F. B. Gray and W. S. Culbert (skip), 15 shots up. The president (Mr. William Peebles) presented the prizes, which were given by W. B. Cartwright, Ltd.

The annual match between Blandfield Golf Club (T. & H. Smith, Ltd.) and the Edinburgh Chemists' Golf Club was played over Ratho Park golf course on June 15, and resulted as follows:—

Blandfield		Edinburgh	
H. Stout and J. W. Laing	0	J. Finlay and J. Bowman	1
D. Mackintosh and R. M. Wallace	0	H. D. Robson and M. Stoddart	1
R. Y. Meikle and A. S. Cooper	1	W. J. Rosie and E. Randall	0
T. Allan and J. A. Duncan	0	W. A. M. Hourston (capt) and J. P. Gibb	1
R. W. Pringle (capt.) and A. Nimmo	0	A. Irvine and J. B. Crawford	1
A. Young and G. Fraser Anderson	1	W. H. Chambers and J. M. Foote	0
	2		4

GLASGOW and Edinburgh chemists held their inter-city bowling match on Queen's Park bowling green



recently for the Cairncross medallion and prizes given by Lorimer & Moyles, Ltd., and James Taylor, Ltd. After high tea, Mr. William Peebles (president of the Glasgow club) called on Mr. A. Robertson (Lorimer & Moyles, Ltd.) to present the Cairncross medallion to Mr. C. R. Brown (president of the Edinburgh club). Mr. Robertson also handed the prizes (cut crystal) to the winning rink. Mr. Robertson was thanked for making the presentations. Mr. Peebles then called on Mr. P. S. Govan (James Taylor, Ltd.) to present the prizes (umbrellas) from his firm to the best rink on the Glasgow side. Details of the scores are as follows:—

<i>Glasgow</i>		<i>Edinburgh</i>	
J. C. Murdoch ...	21	H. Morrison ...	23
W. J. Moffat ...	18	A. Black ...	29
H. P. Arthur ...	22	D. Mathewson ...	18
	<hr/> 61		<hr/> 70

Summer Outings

THE Liverpool staff of Francis Newbery & Sons, Ltd., held an excursion to Ness (Cheshire) on June 4. Croquet, clock golf and quoits competitions and races contributed to an enjoyable day. Prizes for all the competitions took the novel form of a parcel of eggs. A telegram conveying good wishes from the managing director (Mr. W. J. Williams) was read.

ON June 11 the staff of John Bell, Hills & Lucas, Ltd., visited Southend for their annual summer outing. The morning was devoted to sports held in Southchurch Park; the events, some strenuous and some humorous, were keenly contested. A cricket match (ladies v. gentlemen), played during the afternoon, was very enjoyable and exciting, the gentlemen winning by two runs. Dinner and tea were served at Garon's Center House, Mr. J. Stuart Hills (managing director) presiding; other members of the board present were Messrs. H. B. Stevens and L. N. Hensman. The Walter Hills shield, competed for annually, was won by the dispatch department.

Business Changes

MR. A. D. FOX, chemist and druggist, Lancaster, has opened another branch in Bowerham Road.

MR. L. W. GOULD, chemist and druggist, is opening a business at 131 Norfolk Street, Sheffield.

MR. H. V. RHODES, chemist and druggist, has opened a pharmacy at 13 Wakeman's Hill Parade, Colindale, London, N.W.9.

F. H. FAULDING & Co., LTD., wholesale druggists, have removed from 76 Finsbury Pavement, E.C.2, to Spencer House, South Place, London, E.C.2, as from June 24.

Topical Reflections

By Xrayser

A Major Question

is asked by Mr. Ernest Quant when he inquires how many pharmacists to-day are really practising pharmacy (*C. & D.*, June 18, p. 671), and I fear that question could not be answered satisfactorily from his point of view. We do not practise pharmacy if we carry on business as chemists and druggists without compounding the medicines we sell, whether ordinary galenicals, or preparations outside the B.P. in the production of which skill gained in the conduct of B.P. operations can be applied with advantage. And there is no getting away from the fact that, as recently pointed out by "Manufacturer" (p. 651), not only are quite simple galenical preparations ordered nowadays as a rule from wholesale houses, but the practice is growing of sending isolated prescriptions to wholesale houses to be compounded, because there is something tricky or difficult in the prescriptions, or the operation of compounding may be attended by some degree of unpleasantness. This is not practising pharmacy, neither is it economical. I am disposed to agree with Mr. Quant that our craft is suffering from inefficient training during apprenticeship, and I would add that a serious responsibility rests with the Council of the Pharmaceutical Society in this connection.

Not Only Apprentices

but also assistants are victims of short-sighted policies which prevail among chemists and druggists in business on their own account. There is much in the comments of a writer on assistantship to-day (*C. & D.*, June 18, p. 669) which merits consideration. Years ago it was quite common for proprietors of pharmacies to withhold what ought to have been regarded as necessary information from those in their employment, and I can well remember cases in which the trade journals were carefully kept out of sight by jealous but short-sighted principals. They

failed to see that it was an advantage for their assistants and apprentices to be as up-to-date as themselves, and their business suffered accordingly. I had hoped that this state of affairs was a thing of the past, but apparently it is not, and so we find the inadequacy of the information communicated to apprentices and assistants by their employers reflected in inferior service both to those employers and to the general public. Elsewhere we find employees who are properly treated in this respect taking something like a proprietary interest in the business to which they are attached, and that, I would suggest, is the sort of attitude to encourage.

Youth's Answer

to your call for service to be rendered by sharing in the conduct of pharmaceutical affairs is not, I trust, to be confined to the excuses put forward by a recent correspondent (*C. & D.*, June 18, p. 688). It may well be that the younger men in pharmacy hesitate to come forward and take part in the public life of their craft because they wish to get on in business. But if they are all to refrain from taking an active interest in the conduct of the affairs of their own particular community until they attain the age of fifty, it will be a bad thing for pharmacy generally. As I have stated on a previous occasion, youth may perhaps be regarded as a comparative term in connection with eligibility to serve as a representative, and I would suggest that from thirty-five to forty is youthful for this particular purpose. There must be many suitable persons about such ages in our ranks, and the number required for service at any given time is not great. If those selected and subsequently returned to office were properly backed by the group they directly represent, if only to the extent of providing them free of charge with a competent locum for the days they were compelled by their official duties to be absent from the usual daily round, the tax upon their time and pocket need not be great.



Legal Reports

Perpetual Injunction Granted.—A motion by Irving's Yeast-Vite, Ltd., against H. Miller, Leicester, trading as Mips, was mentioned to Mr. Justice Clauson in the Chancery Division of the High Court, London, on June 21. On behalf of Irving's Yeast-Vite, Sir Leslie Scott, K.C., said that Mr. Miller had consented, on terms that the hearing of the motion be treated as the trial of the action, to judgment for the plaintiff company for a perpetual injunction restraining Mr. Miller, his servants or agents, from infringing the registered trade mark "Yeast-Vite," from using the mark for selling medicinal preparations not of the plaintiff company's manufacture as the plaintiffs', and from passing off or using or displaying printed matter calculated to pass off Mr. Miller's goods as and for Irving's Yeast-Vite, Ltd.'s, or as the same as those goods. Mr. Miller undertook to deliver up or destroy all printed matter and to pay the costs, agreed at £10. Mr. Holroyd Pearce, for the defendant, assented to the terms.

False Trade Description.—At Woolwich Police Court, London, on June 21, Emanuel Lobb, Newquay Road, S.E., was summoned for attempting to obtain money by false pretences and for selling bath salts to which a false trade description was applied. He pleaded "Not guilty" to both summonses. Mr. Edmond O'Connor, who prosecuted, said on June 6 Detectives Duff and Oakes, with Mr. Tipping, dispatch manager to Yardley & Co., Ltd., went to Woolwich market, where the defendant was selling goods. Lobb picked up a packet of bath salts, and said: "Here we have some bath salts, guaranteed made by Yardley's, the firm that advertises so much." Upon analysis it was found that the salts sold by the defendant contained 97.8 per cent. of ordinary salt. Mr. W. J. Tipping, dispatch manager to Messrs. Yardley, said the salts produced were not their products. The magistrate said he was satisfied that Lobb was selling these salts under a false trade description. It was an extremely serious case. Messrs. Yardley had a high reputation, and it was important to them and to the ordinary man in the street that people should not have foisted upon them something said to be made by Yardley's, but which was in fact made by some obscure firm without the reputation which Yardley's enjoyed. Lobb seemed to be honest, but there would be a fine of 40s. on the second summons.

Minimum Retail Prices Enforced.—In the Chancery Division of the High Court, London, on June 21, Mr. Justice Maugham had before him a motion for an interim injunction in an action brought by The British Drug Houses, Ltd., J. Grossmith & Sons, Ltd., Mellin's Food, Ltd., and Newton, Chambers & Co., Ltd., on behalf of themselves and all other members of the manufacturers' section of the Proprietary Articles Trade Association, against Sunshine Pharmacy, Ltd., North End, Croydon, and Dora Earle, Acre Lane, Brixton, S.W. Mr. Trevor Watson, K.C., and Mr. H. Glyn-Jones appeared for the plaintiffs, and Mr. H. A. Christie for the defendants. Mr. Trevor Watson announced that the case had been settled on the footing that the motion should be treated as the trial of the action, and the defendants consenting to a perpetual injunction in the terms of the writ and paying £25 as damages and the taxed costs. The terms of the injunction were that the defendants and their servants and agents would be restrained from selling or supplying directly or indirectly any goods manufactured or sold by any of the plaintiffs, and named in the Protected List of the Proprietary Articles Trade Association, at lower prices than the minimum retail prices set out in the Protected List, and from selling or supplying any such goods otherwise than in a shop in the ordinary course of retail business, and from selling or supplying any such goods to the D. & L. Drug Stores, Ltd., or to Sidney Egelnick. Mr. Christie assented to the order asked for, and his lordship said there would be judgment, by consent, in the terms agreed.

New Companies and Company News

P.C. means Private Company and R.O. Registered Office.

V. V. & V., LTD. (P.C.).—Capital £1,000. Objects: To carry on the business of pharmaceutical chemists, druggists, opticians, etc. Solicitors: Smiles & Co., 15 Bedford Row, W.C.1.

SIDNEY SMITH PHARMACY, LTD. (P.C.).—Capital £500. Objects: To carry on the business of pharmacists, chemists, druggists, drysalters, etc. R.O.: Sevenoaks Road, Borough Green, Kent.

SANGERS, LTD.—Final dividend of 10 per cent. on ordinary shares, making 17½ per cent. for the year, the same as for the previous year.

BRITISH GLUES & CHEMICALS, LTD.—Final dividend of 4 per cent. on 8 per cent. cumulative participating preferred shares for half-year ended April 30, 1931.

PHOSFERINE (ASHTON & PARSONS), LTD.—Net profit for the year ended April 30 was £32,967, as compared with £35,642 for the previous year. Brought forward, £8,354, making a total of £41,322. £5,000 set aside for reduction of preliminary expenses. Dividend on 8 per cent. participating ordinary shares absorbs £32,000. Carried forward, £4,322. Meeting at the Memorial Hall, London, E.C.3, Thursday, June 30, at 11 a.m.

Liquidation

Ring Medical Hall, Ltd., Dublin.—The statement of affairs shows assets estimated to realise £29, and liabilities £226.

Voluntary Liquidation

H. Camish (Chemists), Limited, The New Pharmacy, 1, 181 Finchley Road, Golders Green, London, N.W. The statutory meeting of the creditors was held recently at the offices of Messrs. Francis, Nicholls, White & Co., C.A., Cheapside, London, E.C., when Mr. H. Camish, one of the directors of the company, presided, and said that the shareholders had previously passed a resolution nominating Mr. A. Granville White as liquidator. According to a statement of affairs the liabilities amounted to £721, of which £713 was due to the trade, and there were partly secured creditors for £38, who held security valued at £30, leaving them unsecured £8. The assets consisted of stock in trade at cost £100; book debts £7; and fixtures £40, making total assets of £147, from which had to be deducted £11 for preferential claims, leaving net assets of £136, or a deficiency of £585. The company was incorporated on February 29, 1932. The turnover latterly had averaged £28 per week, on which a gross profit was earned of £7. As against that, however, the overhead expenses amounted to £11 per week, which included wages of £6 10s., and rent and rates £3 10s. After discussing the position the creditors passed a resolution confirming the appointment of Mr. White as liquidator, together with a committee of inspection.

Gazette

Bankruptcy Acts

RECEIVING ORDER AND ADJUDICATION

MAXWELL, A. T., 51 Penny Street, Lancaster, chemist and druggist, under the style of W. J. Lund & Co.



HUA T'O, A CHINESE PHYSICIAN AND SURGEON

Hua T'O flourished circa 220 A.D. He was famed for his skill in the use of acupuncture and cauterization, and was credited with being able to foretell the sex of unborn children. Before commencing a major operation he gave the patient hashish. At the instance of a commander, whose skull he proposed to trepan, he was arrested, ending his days in prison. His only book was by an error thrown into a fire and practically destroyed; afterwards he was regarded as a god of healing.

From a Chinese painting.



HUA TO
A Chinese Physician
and
God of Healing



Early History of Pharmacy and the Apothecary in Scotland



By Thomas Ferguson, M.D., F.R.C.P., Edin.

BEFORE the advent of the Normans the healing art in general and the administration of drugs in particular were largely associated in the minds of the populace with the mysteries of magic. Even such healing powers as were possessed by the early saints were attributed to this rather than to their religious faith or knowledge of the medical lore of ancient civilisations, which might have been brought to this country by the early Christian missionaries. The waters of certain wells, some of them still in existence, were credited with remarkable curative virtues, while certain rocks and precious stones were cherished as amulets, which, when immersed in water, imparted to it therapeutic properties. Sir Walter Scott, in his introduction to "The Talisman," gives a description and history of one of these amulets, the Lee penny. Sir Simon Lockhart of Lee, who accompanied Lord Douglas on his expedition to the Holy Land bearing the casket containing the heart of King Robert the Bruce, made prisoner an Emir of wealth and distinction, whose mother, as part of the ransom for the return of her son, handed over "the talisman," a pebble inserted in a coin supposed to be of the Lower Empire. We are told that water in which it was dipped operated as a styptic and a febrifuge, as well as exercising some favourable influence over the destinies of men.

Many magical methods of healing survived from the time of the Druids, and were given credence centuries later in country districts. Among these were the administration as remedies of blood, bile, and excrements, the wearing of coral necklaces, and purification by dew and by fire at the feast of Beltane in May. With the Norman Conquest came an increase in learning of all descriptions, including medical lore. The Abbeys of the Scottish Border, founded in the time of King David I at Melrose, Dryburgh, Kelso, Jedburgh, etc., were the chief centres of education. They contained libraries with medical books written in Latin. There were also gardens attached to the monasteries, and in these were grown the herbs from which medicines were compounded. Dr. Comrie gives us a list of simples which were cultivated at this time—rose, bean, savory, costus, hedge mustard, cumin, fennel, hybiscum, lily, sage, rue, gladiolus, pennyroyal, mint, rosemary and fenugreek. Another well-known garden of medical herbs was situated at Torpichen Priory, and was called the Knight's Garden.

MICHAEL SCOTT

THUS in these days medical practice was almost entirely in the hands of the priesthood, and the most learned physicians were those who had studied their subject in Continental countries. Among churchmen who studied medicine abroad and practised it with conspicuous success in our land must be particularly mentioned Michael Scott, whose memory was immortalised in the "Lay of the Last Minstrel," and whose burial place may still be seen beneath the east window in Melrose Abbey. To such skill did he attain that the uneducated peasantry regarded him as a wizard capable of performing wondrous miracles outside the scope of medicine or any other science. His vade-mecum appears to have been a pill compounded of aloes, rhubarb and other fruits and flowers, and known as *Pilula Magistri*

Michaelis Scoti. It was said to relieve headache, purge the humours wonderfully, produce joyfulness, brighten the intellect, improve the vision, sharpen hearing, preserve youth and retard baldness. In addition to the practice of the healing art as carried out by the Church there were men, known as herbalists, who prepared drugs from herbs grown by themselves and prescribed them when necessary, a reliance on their magic properties being often the chief factor in effecting a cure.

GAELIC MEDICAL MANUSCRIPTS

A GOOD idea of the pharmacy of the times can be obtained from a perusal of the Gaelic medical manuscripts still existent in the Advocates' Library in Edinburgh (now the Scottish National Library). Most of these are of the sixteenth century, but some are of much earlier date. In addition to treatises on classified diseases and their treatment, there are chapters devoted to pharmacy, where the proper method of weighing and measuring drugs is described. The influence of the elements and of the planets, as well as the doctrines of the humours, are also discussed. The Gaelic physicians of these days regarded the manuscripts as standard works on their subject; the MacBeths and the McConachers, the two families to whom they chiefly belonged, were among the best-known practitioners in the Highlands for several centuries.

Long and formidable prescriptions appear to have been the fashion at this time. So much was this the case that Robert Henryson, a Dunfermline poet of the sixteenth century, thought fit to satirise them in a series of six humorous prescriptions, "Sum practysis of Medecyne." One of these may be quoted:—

"Dia Custrum.

The ferd (fourth) feisik (physic) is fyne, and of ane fellow (high) pryce,
Gud (good) for haising (hoarseness) and hosting (coughing) or heit at the hairt (heartburn).
Recipe; thre sponful of pe blak spyce,
With ane grit (great) gowpene (handful) of pe gowk (cuckoo) fart;
The lug of ane lyoun, the guse (? gut) of ane gryce (a sucking pig);
Ane vnice (ounce) of aur oster (oyster) poik at pe neper parte,
Annoyntit with nurice (nurses) dounge; for it is rycht nyce
Myngit (mixed) with mysdirt and with mustart,
Ze may clamp (add) to pis cure, & ze will mak cost,
Baylk be bellox (testicles) of ane brok (badger)
With thre crais of the cok (cock) } is gud for pe host."
The schadow of ane Zule stok (winter cabbage)

COURT APOTHECARIES

THE Kings of Scotland from James II onwards appear to have had apothecaries attached to their courts. It may be here mentioned that the term "apothecary" in Scotland had a somewhat different significance from the corresponding term south of the border. The Scottish apothecary was a pharmacist, but he might also visit his patients and prescribe for them, as well as carry out



certain minor surgical operations, the scope of which varied with the times and was chiefly dependent on the sufferance of the surgeons. A letter from James IV to the Town Council of Edinburgh in 1509 asked that a certain house and booth, which had been used for the same purpose in his grandfather's time, should be set aside for the use of "Maister Stephane, ypothegar" who was court apothecary at that time. The Accounts of the Lord High Treasurer of Scotland contain numerous references to Stephane and his contemporaries, and several of the entries throw an interesting light on payments made in respect of their services. Thus in the time of James III, among the "Assignationes of Yerely pensiones," there is an "item at the Kingis commande xviiijth Decembris (1473) to Maister Thomas' potingare iij elne of Inglis russat (cloth) coft (purchased) fra Thom of Yare, price elne xxiijs, summa iijls xijs," while there are repeatedly such entries as (1474) "to Stephen potingare be a precept subscruit with the Kingis hand iijlxvsvjd."

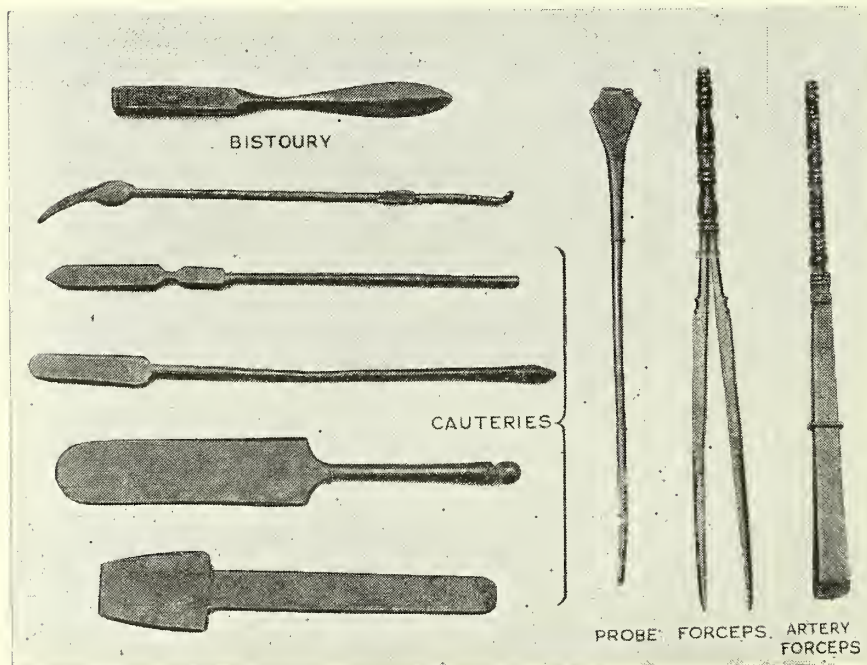
That these court associations were not without financial advantage to the apothecaries concerned is suggested by the fact that the payments made to William Foular for "potinchary taen by him to the King at divers times" between April 25, 1500, and March 27, 1501, totalled no less than £59 18s. 6d. Foular appears to have been a man of wide interests, for in 1501 he sold to the King, for a consideration of £3 17s., "ane buke callit ortus sanitatis, tua gret psalteris and ane matin buke of the use of Rome." About the same time, too, there are records of payments made for "certain droggis" brought from France, while in 1505 there are other items to William Foular "for ane blud stane and thre unce uthir stuf for the Quene for bleding of the nas efter ane ressait of Maister Robert Schaw," and "for six pund fyne grene gyngear and iijj pund citronis comfitis to the King, ilk pund vj sh." It was customary for the sovereign to make gifts of clothing to his apothecaries—Inglis russat and Rislis black—and in the accounts for 1506-07 there are several records of royal payments to the apothecary of St. Andrews—for drogary, for gold fulgie, and, at a cost of 3s., for "two pund succour to make

conserva of borage." Such payments as these keep cropping up all through the accounts; in the list of disbursements following the death of the Queen dowager in 1560, for instance, there are notes of sums of £30 paid to each of "the Medicinar" and "La poticarre," and in June of 1562 there is an item of a few shillings "to ane apotigiar fa droggis to Lord Robert Stewart, being seik, as his acquittance schawin upoun compt beris."

SURGEONS, APOTHECARIES AND BARBERS

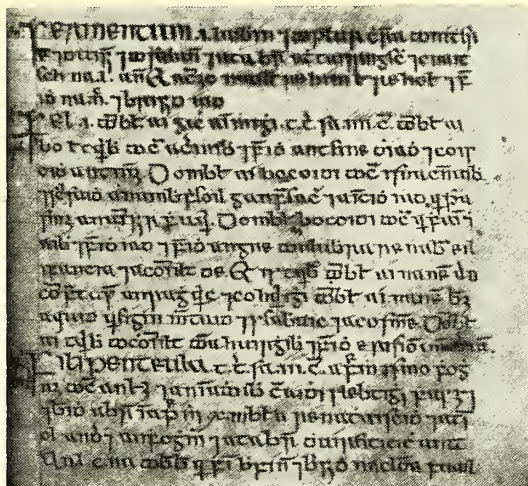
THE history of the apothecary in Scotland is intimately linked up with that of the surgeon. In 1505 the Chirurgeons and Barber Chirurgeons of the City of Edinburgh had been formed into a Deaconry by the Town Council. They had the liberty of distilling aqua vitae, a right which they retained for the next hundred years, and regulations were made that no apprentice was to be taken unless he could read and write; when the apprenticeship was successfully completed the student had to give a dinner to the Master of the trade. The association of surgeons and barbers had its origin in the fact that both duties had been undertaken formerly by the monks, who regarded shaving as a mystic religious rite: the striped barbers' pole is a symbol of ribbon for bandaging the arm in bleeding. Later, in the time of Queen Mary, the members of the Deaconry were made exempt from attending juries, watching and warding within the City and liberties of Edinburgh. Gilbert Prymross, 1535-1615, was one of the most famous of the early barber surgeons, and held the appointment of chief surgeon to the King for many years. He was an ancestor of the Earl of Rosebery who, in 1909, presented to the Royal College of Surgeons of Edinburgh a replica of the mortar which Prymross had "employed in compounding the gruesome drugs which he administered to the unfortunate populace."

The surgeons and barbers had many struggles with the apothecaries to prevent the latter from invading their craft, and in 1575 the Town Council of Edinburgh prohibited apothecaries and others who did not belong to the Surgeons' Guild from carrying out any surgical procedures. The bellman of the burgh was sent forth to intimate their decree to certain of the apothecaries who were probably considered the most likely to transgress. Archibald Mudie, an apothecary, was brought up before the Town Council in 1587 because he "had been practising surgery, and in particular he had been curing and panning of Mathow Weiche of ane ulcer in his fute for three weeks past and daily and hourly applying thereto various local remedies." A fine of 40s. was imposed. The first attempt at control of drugs sold by the apothecaries of Edinburgh was made by James VI, in 1621, when inspectors were to be appointed yearly "to have the care and charge to search and try the freshness and sufficiencie of all drogges, wares and medicaments being within all whatsumever apothecaries shoppes within our said burgh of Edinburgh, and



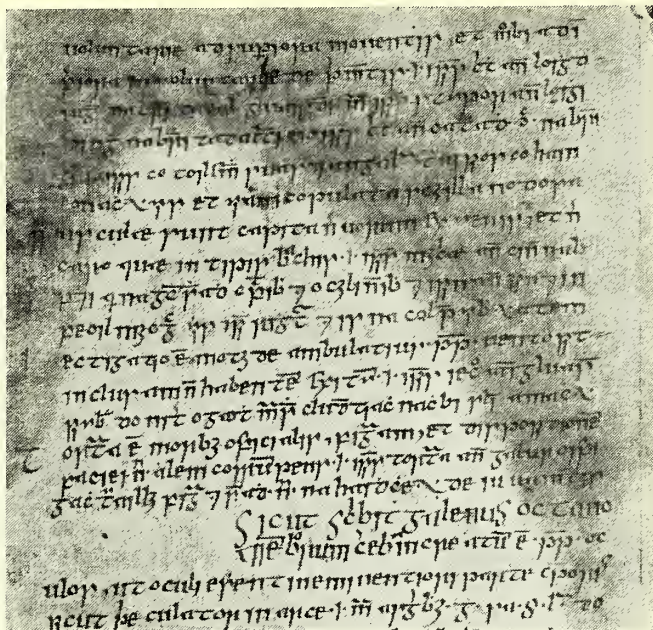
BRONZE SURGICAL INSTRUMENTS USED BY THE ROMANS IN SCOTLAND

Left.—A set of cauteries and a bistoury with the blade missing. On the right, a probe, forceps and a pair of artery forceps. These items are from the Clerk of Penicuik Collection



GAELIC MEDICAL MSS.

Left.—Gaelic MS. No. 3 in the National Library of Edinburgh, containing descriptions of drugs arranged alphabetically. Right. Gaelic MS. No. 60, showing Latin commencement of a paragraph



gif they be found corrupt and insufficient to destroy the sayme."

In Glasgow the Faculty of Physicians and Surgeons was established through the effort of Peter Lowe, in 1599. This body henceforward regulated the practice of medicine, surgery and pharmacy in the West of Scotland. The barbers also were conjoined with the Faculty from 1602 till 1708. The original Charter contains a paragraph with reference to the supervision and inspection of the druggists' wares, and decrees "that nane sell retoun poison, arsenic or sublimate, under the pane of ane hundred merkis, excep onlie the apothecaries quha sall be bund to tak caution of the byaris, for coist, skaith and damage."

A RATIFYING ACT

ANDERSON'S Scots pill was a proprietary remedy which came into vogue in the early seventeenth century. Its main constituent was aloes, and it was used for headache, stomach troubles, constipation, rheumatism, etc. These pills were so highly valued that they remained in fashion for about 300 years.

In 1641 the Scottish Parliament passed an Act ratifying all the privileges of the surgeons and barbers of Edinburgh, and giving power to apprehend all persons practising surgery who were not freemen of the craft and to fine them £20 Scots for contravention. This Act was further confirmed by an edict of the Town Council, which, in 1655, emphasised the fact that the apothecaries were not exempt, and attempted to define the province of the surgeon's art. In his criticism of this Act, Eccles, a staunch physician, says, "The Chirurgeons and Barber Chirurgeons now monopolise to themselves the whole of that noble and supreme science of medicine as well as to the directive and preparative parts as to the manual operations thereof . . . very compendiously astringing both what belonged to the physician in his directive part and to the pharmacist in his preparing and compounding." In 1643, in view of differences between the parties, the Town Council convened a meeting of representatives of the surgeons and apothecaries, when it was agreed that the application of searcloth to dead bodies, all manual operations and applications about dead or living bodies, and the curing of diseases such as tumours, wounds, ulcers, luxations, fractures, and the curing of viroills, etc., should belong to the surgeon, while the apothecary was only to be allowed the administration of medicine internally.

A LANDMARK IN PHARMACY

THE year 1657 is a landmark in the history of pharmacy in Edinburgh, for not only did it mark a union between the surgeons and apothecaries, but in this year for the first time an examination became compulsory for all those who wished to practise pharmacy within the city. From about 1640 onwards, the surgical craft had been getting into difficulties on account of paucity of members, and in 1657 its regulations were relaxed to admit two apothecaries, James Borthwick and Thomas Kincaid. They had served apprenticeships as pharmacists and not as surgeons, and from the date of their reception into the Incorporation the era of the surgeon apothecary commences. Pharmacy was now taught along with surgery, and it was forbidden to practise the art without examination by members of the Incorporation. It was also laid down that from time to time the baillies and two or more apothecaries were to inspect the drugs on sale within the burgh. About this time the surgeons were ceasing to act as barbers, many of them finding it more dignified as well as more remunerative to open apothecaries' shops, while a number of the apothecaries, who were proficient at bleeding, also professed to be surgeons. This was, however, not universal, some remaining surgeons only and others purely pharmacists. Apprentices had now the option of serving their time either with the barber surgeon or with the surgeon apothecary. In Glasgow, under the regulations of the Faculty of Physicians and Surgeons, apprentices had to serve seven years, during the last two of which they were given free board and a fee. Before practising in Glasgow the student had to be enrolled as a burgess of the town and had to pay the Faculty a quarterly subscription. In other parts of Scotland the surgeon apothecary became the general practitioner of the seventeenth century after serving an apprenticeship of about five years, though those of any standing usually also attended lectures in the cities or studied medicine at a foreign University.

SURGEONS AND APOTHECARIES AT WAR

ABOUT 1680 war again broke out in Edinburgh between the surgeons and apothecaries, who were considered by the surgeons to be taking too many liberties in encroaching on the surgeons' legitimate profession. One of the offenders, Patrick Cunningham, was charged with "opening a vein of the Earl of Carnwarth and with letting the blood of the Lady Lee." To settle the



PHYSIC GARDENS IN SCOTLAND

REFERENCE has already been made to physic gardens in relation to the ancient abbeys. In later days the Incorporation of Surgeons consistently sought to promote the study of botany by its members and apprentices. In 1664 a botanical garden had been established near the North Bridge in Edinburgh by James Sutherland, and an attempt was made to secure an Act of the Town Council incorporating this garden into the University. The surgeons opposed the effort, and were able to secure its suspension; by this time they had themselves a botanical garden, and in 1668 entered into an agreement with George Cathcart, a gardener, to lay it out with medical herbs and flowers for the use of the calling. There appears to have been no dearth of physic gardens in Edinburgh in the 1660's, for when Dr. Balfour settled there in 1667 he reared in the garden attached to his house "many plants never before seen in Scotland." Sibbald and Balfour decided to lay out a physic garden on a large scale, and obtained from John Brown, Keeper of the North Gardens of the Abbey, a piece of ground which they placed under the charge of James Sutherland, "a youth who had, by his own industry, attained great knowledge of the plants." A collection of some 800 or 900 varieties was soon established. Balfour and Sibbald interested several of the physicians in their enterprise, and secured from them financial contributions towards extension of the garden's scope. Some of the influential surgeon apothecaries regarded the garden with distrust as an approach to the establishment of a College of Physicians; but they were won over, and assisted Sibbald to obtain from the Town Council a lease to Mr. James Sutherland for nineteen years of the garden belonging to Trinity Hospital and adjacent to it. The establishment of this garden was, in the first instance, independent of University influence; it aimed primarily at the enlightenment of the apothecaries and was doubtless associated in Sibbald's mind with the future issue of a pharmacopœia. Sutherland published in 1683 his "Hortus medicus Edinburgensis." The Trinity Hospital garden was submerged when the north loch was drained during the siege of Edinburgh Castle in 1689.

During the last decade of the seventeenth century Sutherland, who had by this time been appointed Professor of Botany, solicited the patronage of the calling, seeking a fee of one guinea in respect of all apprentices and others having "the liberty of the shops." In return for this fee he undertook to own all masters of the calling as his patrons and to demonstrate the plants to them at a "solemn public herbarising in the fields" four times per annum. For the same inclusive fee he was to teach the apprentices and servants at such time daily as their masters should appoint. The teaching of Sutherland and his successor, Preston, appears to have been so interesting that the apprentices were wont to dally in the garden, and their hours of instruction had to be more rigidly defined—from 4 a.m. to 7 a.m., "and thereafter to go straight to their several shops." Hope, who became Professor of Botany in 1761, obtained a grant from the Treasury and removed the garden to a site on the west of Leith Walk.



PRINCE CHARLIE'S MEDICINE CHEST

This elaborate travelling pharmacy has further containers at the back with bottles and canisters (seen at the top of the photograph). Much ingenuity was expended in packing the maximum number of articles in a minimum of space

Royal College of Physicians of Edinburgh

dispute it was decided to seek the opinion of some "disinterested, learned, and skilful physicians," and after consulting with them the Lords declared that in future phlebotomy must be carried out only by surgeons, except in cases of necessity or charity, and that only the surgeons should make incisions on dead bodies, but that the makers of scarloth and the apothecaries might wrap dead bodies where no incision was necessary. This decision culminated in 1682 in the Decree of Separation of the apothecaries from the surgeons. The Lords then found that both callings required special care and skill, and must not henceforth be practised by the same person. Surgeons might buy and sell drugs as any merchant did, and might make up preparations for external application, but the preparation of medicines for internal use was to be left to the apothecaries. In future apprentices were not to be taken to learn both arts; they might be surgeons or apothecaries, but not both. In practice, this last provision was not strictly observed.

In 1681 the Royal College of Physicians of Edinburgh was erected by a patent from King Charles II. The patent included a list of the duties to which the then Chirurgion apothecaries were to be restricted. They were to have "the Liberty of curing all Wounds, Bruises, Fractures, Dislocations, Contusions and sicklike being the subject of Chirurgical Operations and accidents arising thereupon," and they were debarred from practising as physicians. Following the Decree of Separation of 1682 the simple apothecaries now came under the protection of the College of Physicians, and were so to some extent relieved from the oppression which the surgeons had exercised over them previous to this date.

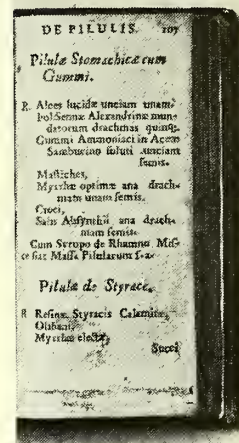
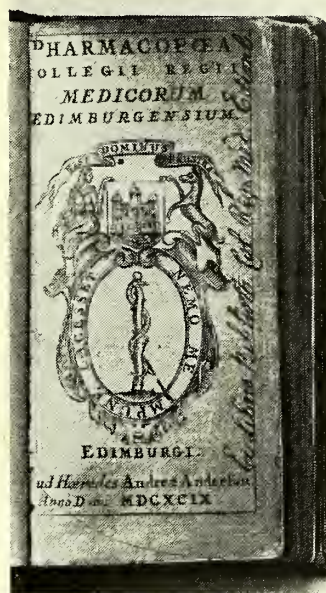


Edinburgh was not alone in the development of physic gardens during the eighteenth century. In 1704 it had been decided that a portion of the grounds of the College in Glasgow should be converted into a physic garden, and John Marshall, a surgeon in the city, was appointed as Keeper of the Garden and to give instruction in botany to students at an annual salary of £20. At first entry to the garden was restricted to masters and those students who were the sons of noblemen. The botanic garden existed in the grounds of the College for about a century. At the beginning of the eighteenth century Dr. John Wodrow was pre-eminent among medical botanists in Glasgow, and for a number of years received an annual grant from the Faculty to enable him to cultivate his physic garden. In 1748 the Town Council of Aberdeen decided to lay out a physic garden in the immediate neighbourhood of the Infirmary, but this does not appear to have proved a success, and it was abandoned in 1800.

THE EDINBURGH PHARMACOPŒIA

THE Pharmacopœia of the Royal College of Physicians of London only had jurisdiction as far north as Berwick, and for long dispensing in Scotland threatened to get into a chaotic state. As was to be expected abuses crept in, omission and substitution in dealing with the doctors' "bills." The issue of a Pharmacopœia to regulate Scottish practice was obviously a task lying to the hand of the newly incorporated College of Physicians of Edinburgh; it had, indeed, been advanced as one of the chief indications for the incorporation of the College. Early pillars of the College, like Sibbald and Balfour, had established botanic gardens where the apothecaries might study vegetable *materia medica* and obtain supplies of fresh plants for use in their dispensing, but these activities owed their origin to the interest of individual physicians rather than the profession as a whole. On January 18, 1682, however, it was remitted to a Committee of the College to prepare a pharmacopœia, and in August of the following year instructions were given that the draft should be printed. The imminent publication of the book was viewed with disfavour in some quarters, and all sorts of vexatious obstacles were placed in the way, to the great disgust of Sibbald, who had been fathering the measure and was convinced of its necessity. At last, in 1699, there was published the first Pharmacopœia of the Royal College of Physicians of Edinburgh. It was a small duodecimo volume, and, including the index, numbered 236 pages. The title-page bears the Arms of the City and the legends of the City and of Scotland, the latter surrounding a serpent coiled about a rugged staff. The Pharmacopœia contains between 800 and 900 articles of the *materia medica*, mostly of vegetable origin, with directions for the preparation of various waters, syrups, powders, lozenges, pills, ointments and tinctures. The recognition of the system of Galen is testified to at pages 156 and 157, where four greater warm seeds and four lesser, four greater cold seeds and four lesser, are given with cordial flavours and fragments of precious stones. Among the animal substances in the first Pharmacopœia are *Urina juvenis sani impuberis in aqua stipitica* and *spiritus sal volatile et oleum cranii hominis violenta morte extincta*. Some of the approved preparations contained from forty to seventy ingredients—"Mithridatium Damocratis" had forty-eight, chiefly flowers, seeds, gums and oils, and was given in cases of poisoning. The Pharmacopœia has been stigmatised as a "wild exuberance of composition," but it compares not unfavourably with the London Pharmacopœia of the time, and was far in advance of the popular medicine of the day as typified in John Moncrieff's "Poor Man's Physician," first published in 1712.

The Pharmacopœia soon asserted its position, and the College, realising the importance of keeping it up to date, issued a revised second edition in 1722, a third in 1736, and other twelve before the coming of the first British Pharmacopœia. The second and third editions showed the introduction of more animal substances. Thus there are repeated references to the use of such



EDINBURGH PHARMACOPŒIA

Left.—Title page of First Edition, 1699. Right.—A page dealing with pills, half actual size

Library of Royal College of Physicians of Edinburgh

agents as dried bees, dried millipedes, and even dried toads, while urine mixed with salt is mentioned in the preparation of sal ammoniac. The Edinburgh Pharmacopœia was soon accepted as regulating Scottish practice, and the revised Pharmacopœia issued by the London College of Physicians in 1724 was not made applicable to Scotland. There were published in Edinburgh during the eighteenth century several editions of the Pharmacopœia Pauperum, which contained extracts from the standard Pharmacopœia, as well as an index to the treatment of specified diseases and posological tables.

THE INSPECTION OF SHOPS

FOLLOWING the formation of the College of Physicians in 1681 and the Decree of Separation of the Apothecaries from the Surgeons in 1682, a violent quarrel arose between the physicians, the surgeons and the simple apothecaries as to which of them should carry out the inspection of the drug shops. The Patent of Erection of the College of Physicians empowered "the president and Censors so oft as they shall find cause to make search, take notice and inspection of the Drugs and Medicaments simple, which are or shall be to be sold within the City, Suburbs and Liberties of Edinburgh, that they be fresh, good and healthful, and such as may be securely used and applied for curing the Diseases and Infirmities of His Majesties Lieges." Further legal authority was granted the physicians in 1684 by an Act of the Privy Council ratified in Parliament ordaining

"the Royal College of Physicians at least twice a year to visit all apothecaries' shops and chambers within Edinburgh, Suburbs and Liberties thereof, calling to their assistance one or two of the oldest or ablest of the Brotherhood of the Apothecaries: As also that they desire one of the Baillies of Edinburgh or respective Magistrates of the place where the shops to be visited do ly, to grant their concurrence in the said Visitation, and these Baillies or Magistrates are Ordained upon such Desires to grant their effectual concurrence for ejecting and destroying all corrupt and insufficient Drugs; and also Ordaining that the Apothecaries when required shall attend and assist the said Physicians, and that all Masters of Apothecaries Shops and Chambers, and their Servants receive the Visitors of the Shops with all respect, and expose to their view all the Drugs that shall be called for and



that upon Oath to be Administrate, both to themselves and Servants, and shall quietly and peaceably suffer the drugs that shall be found insufficient by the said Physicians to be ejected and destroyed, as they will be Answerable. And suchlike Ordaining that no Person who has not been examined and admitted by the Fraternity of Apothecaries be suffered in any time coming by the Magistrates aforesaid, to keep any Apothecaries Shops or Chambers, except such allenarly as shall be tryed and approven by the President and Censors of the said Royal College."

Writing in 1707, Eccles asks:

"Can anything be more just or reasonable than that the Physicians should be convinced and satisfied that the Apothecarie that dispenseth is qualified so to do, and that the Drugs that he is to dispense are good and sufficient. If it were otherwise, both the Patient and Physician are in evident hazard of being cheated and abused. The first in his Health and perhaps in his Life, the other in his Credit and Reputation. If any merchant should refuse to let the quality of his goods be seen, would not the Buyer have all the reason in the world to think that they were not mercatable Wares? But the case is still stronger here, considering that in all mistakes of this Nature, whether occasioned by the Avarice or Ignorance of the Apothecaries, the fault is sure to be laid to the Physician's door, it being next to impossible to find out the Apothecaries' works of Darkness.

"But how just and reasonable soever the visiting of the shops is, at the very mentioning of it, some of the chirurgions (who were conscious how ill their Shops were provided with drugs, and how rotten and sophisticated the small pittance that remained were), were all in a Flame and attacked some of the Physicians with the utmost Insolence and ill Manners, upon that very account. And here I cannot but regrave the hard Fate both of Patients and Physicians in Edinburgh that of fifty six that keep Apothecaries Shops, there are not above ten that have given the least Tryall of their Skill, or are under any Tye or Obligation for their Faithfulness or Honesty. . . . There are only six that were legally Admitted and Sworn."

CONTESTS OF SURGEONS AND APOTHECARIES

AFTER 1682 the apothecaries struggled on in an endeavour to get the Town Council of Edinburgh to recognise their fraternity, but without success, and in 1695 they were further disheartened by the arts of surgery and pharmacy being again reunited by an Act of the Scottish Parliament. This Act declared that the surgeons of Edinburgh were inferior to none, however famous, and that their great skill and reputation in surgery principally arose from their knowledge of pharmacy, whereby they were able to compound their own drugs and medicaments. They were supposed not to be liable to the errors of the simple apothecary. Apprentices were again to be instructed in both callings, and the combined Incorporation of Surgeons and Apothecaries was given authority to appoint visitors to inspect the drugs in the apothecaries' shops. It was further stated that "None shall be allowed to practice in Chirurgery or Pharmacy upon human bodies dead or alive within the City of Edinburgh, the three Lothians, the Shires of Fife, Peebles, Selkirk, Roxburgh and Berwick, but such as shall be tryed and approven by the Chirurgion Apothecaries of Edinburgh." Comrie tells us that in order to enforce these new privileges Letters of Publication were obtained under the Signet of the Privy Council and published at the Mercat Cross of Edinburgh by a macer and by sound of trumpet, and also at the Mercat Cross of the head burgh of each of the several shires mentioned in the Patent. The simple apothecaries considered it unfair that they should have to submit to examination by the surgeon apothecaries,

and held that the two callings should be distinct. They thought, doubtless with reason, that the composite body "neglected and condemned" the simple apothecaries.

About the end of the seventeenth century there were sixty apothecaries in Edinburgh (compared with one in Hamburg; four or five in Stockholm and Copenhagen and fifty-one in Paris, then the same size as London), though, according to Eccles, many of them were incompetent and under no obligation to dispense faithfully the physicians' receipts. The physicians themselves had practically given up dispensing by the year 1695. In 1696 the Town Council of Edinburgh passed an Act forbidding persons within the burgh to practise the art of apothecaries or keep open shops without a warrant, and stating that candidates must first make application for an examination by visitors of the Fraternity.

Differences existed also between the physicians and the apothecaries; and the Royal College of Physicians, in order to maintain its rights and privileges, was at length forced to prosecute some apothecaries who sought to assume the rôle of physicians. Similarly, on their aspiration to practise the art of surgery, the apothecaries were promptly taken to task by the surgeons. The difficulties of the apothecary at this time must have been serious, for he was told by his patients, wishing to avoid a double fee, that if he did not prescribe and carry out minor surgery they would employ another. Eccles criticises the apothecaries for assuming the duties of the surgeons and the physicians, remarking in a fashion perhaps not altogether disinterested that patients do not appreciate how little the apothecary's attendance signifies; they do not realise that directions for taking of the medicine are already written by the physician. "If there be giving of clysters, bleeding, applying or dressing of blisters, setons, cauters or such like it is most reasonable that the apothecaries should be paid for their pains, but for them to cause the patient to pay for their officious attendance is most unconscionable." He further accuses the apothecaries of making too high charges for their drugs, and thinks that the physicians in writing a prescription might mark on it the price the patient will have to pay, this being reckoned to be the intrinsic value of the drugs *plus* a dispensing fee, and he suggests the setting up of a committee of physicians and apothecaries to settle disputes. He is of opinion that if a dispensary were set up drugs could be supplied to subscribers and the poor at cost price, and to others about 75 per cent. cheaper than the charges of the apothecaries, and—unkindest cut of all—this would have the further advantage that the drugs would all be of good quality and there would be no fraudulent substitution. The apothecaries eventually made a strong appeal to Parliament to keep the two employments distinct, or to pass an Act enabling them to practise both pharmacy and surgery where necessary. They suggested that the profession of surgery was sufficiently remunerative not to require to be conjoined with that of pharmacy, and they prayed "that the Pharmacia be kept to his *Materia Medica* and Dispensatory, and the Surgeon to his *Fractures* and *Luxations*, *Astrology* and *Dyets of the Moon*, as appears by his *Seal of Cause*."

POPULAR BOOKS ON MEDICINE

THROUGHOUT Scotland there were many mountebanks who were extensively patronised when they set up their platforms in the towns. Great reliance was placed on books of popular medicine, especially Moncrieff's "Poor Man's Physician" and John Wesley's book, "Primitive Physic, or an Easy and Natural Method of Curing Most Diseases," which had a certain vogue north of the Tweed. The solution of the physicians of 1707 to the chaos of the times may be summed up in a final quotation from Eccles.

"Medicine will be on a proper footing only when none sell, prepare or dispense drugs either as apothecaries or druggists, but such as have given sufficient proof of their skill and qualifications and have taken



the oath (de fidele) faithfully to dispense the physicians receipts; when Apothecaries' shops are regularly visited, and spoilt and corrupt drugs thrown out; when Apothecaries are debarred from advising or administering any internal medicines without a physician's prescript, except in cases of apparent necessity or charity or when a patient desires repetition of a medicine for himself which has formerly been prescribed him by a physician; when Apothecaries are reduced to a number duly proportioned to physicians and patients and are confined to the business of their shops that they may prepare their own medicines and dispense them with their own hands."

In the early years of the eighteenth century, the apothecaries in Edinburgh were rather under a cloud. Their numbers dwindled from sixty in 1700 to 15 in 1721, and meantime the survivors appear to have lived in a state of chronic fear of persecution by the surgeons. Bleeding was carried out more or less surreptitiously, but charges made for this service had to be carefully concealed to avoid reprisals: they were doubtless matters of arrangement when the account was settled. There is preserved in Cresswell's history of the Royal College of Surgeons of Edinburgh the following old account rendered by an apothecary to his patient in 1714:—

	£	s.	d.
A vomiter to Mrs. White ...	0	18	0
Stomatick materials ...	0	8	0
A gl. syrup of lemons ...	0	12	0
Purging potion ...	0	12	0
Three ounces electuary ...	1	4	0
Three ounces syrup of poppies ...	0	4	0
Hysterick Jalup ...	1	15	0
Hysterick plaster ...	0	18	0
A vomiter to Mary ...	0	10	0
A bleeding to Janet ...			
Jelup against worms ...	0	15	0
One interscapulum ...	0	14	0
Militet plaster ...	0	6	0

The charges are an interesting portrayal of the standards of their day, though to modern eyes they appear to be rather uneven: vomiters for Mrs. White and Mary at 18s. and 10s. respectively suggest that emesis must have been rather an expensive luxury.

The salvation of the fifteen surviving apothecaries, however, lay in the straitened circumstances of the Incorporation of Surgeons. The surgeons had been involved in a long and expensive struggle with the barbers, and, doubtless anxious to conserve their depleted resources for another tilt at the physicians, resolved to quieten the apothecaries by absorbing them into their own society. Thus, at a meeting on April 25, 1721, the apothecaries, on representing that they were desirous of becoming members of the Incorporation, were admitted surgeons without examination on payment of £50 each, their new brethren being satisfied of their "sufficiency and qualification to be free surgeons in and among them." This new alliance of surgeons and apothecaries lost no time in tackling the physicians on the pharmacy question, and many conferences were held between the rival camps without ever much prospect of amicable solution. At last the surgeon apothecaries, tiring of these parleys, carried the war into the enemy's territory by applying to the Town Council for an Act to regulate the practice of pharmacy within the City of Edinburgh. They asked that the practice of pharmacy should be confined to those who were entitled to the freedom of their Incorporation after examination by them, and that pharmacists should be obliged to observe the recently published Edinburgh Pharmacopœia. Naturally this venture did not commend itself to the physicians, who regarded it as an encroachment on their privileges, and claimed that the right of examining apothecaries should be vested in themselves. A lengthy argument followed, but like so many wordy warfares of the times, it does not appear to have had a decisive issue. With all these internal dissensions the apothecaries still found scope for charitable activity. In 1707 a druggist's widow



"MORTAR WILLIE"

This old soldier, William Wilson, employed in grinding drugs, was well known in Edinburgh about 1800. He was said to be 107 at the date of the engraving

had left money to the College for the benefit of the sick poor, who had long received free advice from the Fellows of the College, and in 1708 a repository was set up for furnishing cheap medicine to the poor in Edinburgh. At first the surgeons were inclined to look askance at the Royal Infirmary of Edinburgh, but soon six surgeon apothecaries came forward and not only attended the hospital without fee, but even furnished necessary medicines free of cost from their own shops. In 1748 the Infirmary managers decided to fit up an apothecary's shop in the institution, from which both in-patients and out-patients could be served.

PRESCRIBING IN THE EIGHTEENTH CENTURY

THE account book of Dr. Cullen, of Hamilton, which is preserved in the library of the Royal College of Physicians of Edinburgh, throws an interesting light on dispensing practice about 1740. There was a druggist's shop in Hamilton, managed by a Mrs. Johnston, and from her Dr. Cullen bought such substances as oil of turpentine, oil of vitriol, white arsenic, borax, gum benzoin, sandalwood and gentian root. Some of his drugs he obtained from the "Chymicall Laboratory" at Edinburgh. Cullen appears to have done his own dispensing, and his preparations were sold at charges ranging from threepence to a few shillings each. His accounts show such items as two ounces of senna, one shilling; a blistering plaister for yr ear, sixpence; a glass of hysteric drops, sixpence; and one anodyne draught, a shilling. These were stirring days in Scotland. They saw the struggles of the '45; and the medicine chest of Prince Charlie, which, too, is now preserved in the library of the Royal College of Physicians of Edinburgh, contains the formidable array of drugs carried through the campaign by the Prince and his distinguished physician.

In 1776 the Royal College of Physicians of Edinburgh established a dispensary at which an apothecary was appointed to give instruction



in pharmacy and materia medica to students of medicine, while on May 22, 1778, there was granted to the surgeons a new charter under the name and title of the Royal College of Surgeons of Edinburgh. The issue of this new charter finally ratified the separation of surgeons from barbers, on the one hand, and from apothecaries, on the other.

SOCIETY OF DRUGGIST-APOTHECARIES

THE formation in 1786 of the Society of Druggist-Apothecaries in Edinburgh was an important event in the history of Scottish pharmacy. The Society owed its inception to a conviction that many advantages would accrue from such an association and from the possession of a mutual fund. Eighteen members were signatories to the original constitution, which laid down that no person should be admitted into the Society but druggists or apothecaries by profession and that every druggist within Edinburgh and Leith having the qualifications required by the Society for the time might apply for membership. Provision was made for the institution of a regular apprenticeship, and stringent rules laid down for the conduct of the business of the Society. Thus there was a penalty of 2s. 6d. for failure to attend meetings and a penalty of one guinea on members who refused to take office on election to it. The original constituent members each paid to the treasurer one guinea, and members subsequently elected were charged an entrance fee of two guineas; the annual subscription was fixed at £1. All the money thus collected was to belong to the Society as a body and to be applied to the purposes of the Society: no part of the Society's moneys was to be lent at any time to any member or members. The original Bond of Association was presented by Mr. James Mackenzie to the Pharmaceutical Society, and is to be seen at the Society's hall in Edinburgh.

Harley, in his retrospect on pharmacy in Scotland, tells us that towards the end of the eighteenth century the druggists' shops in Edinburgh were mostly to be found in the High Street, Lawnmarket and Canongate, then the fashionable parts of the town, and that the business sites most favoured were the commanding positions at the head of a close or wynd. A well-known figure in Edinburgh about 1800 was "Mortar Willie," an old soldier who was employed by Mrs. McDonald, the keeper of a druggist's shop at the head of Lady Stair Close in the Lawnmarket, and later by her successor, Dr. Burt, an apothecary, in the grinding of drugs. He was assiduous in his devotion to his mortar, and subsequently plied his trade in almost every drug shop in the city. The "Big Mortar" was the constant companion of the apprentice of these days. Dispensing was far from elegant. Labelling, for instance, did not always receive the attention it deserved—sometimes it was omitted altogether, and sometimes the label was tied round the neck of the bottle. Pills were rounded by finger and thumb and sent out in a paper bag or "screw." Ointments were dispensed in oyster shells, for chipped boxes were not introduced till the middle of the nineteenth century.

In Glasgow Mrs. Balmanno's drug shop at the sign of the Golden Galen's Head at the north end of the Laigh Kirk Close was well known and much frequented, while the old lady's physic garden was situate on the Deanside Brae, now known as Balmano Street. Robert Burns, in "Death and Dr. Hornbook" (1785), has satirised one John Wilson, who tried to combine the offices of parish dominie and apothecary:—

"And then a' doctor's saws and whittles,
Of a' dimensions, shapes an' mettles,
A' kinds o' boxes, mugs, an' bottles
He's sure to hae;
Their Latin names as fast he rattles
As A.B.C.

"Cakes o' forsils, earth and trees,
True sal-marimum o' the seas;

The farina o' beans and pease,
He has't in plenty;
Aqua fortis, what you please,
He can content ye.

"Forbye some new, uncommon weapons,
Urinus spiritus of capons;
Of mitehorn shavings, filings, scrapings,
Distilled per se.
Sal-alkali o' midge-tail clippings,
And mony mae."

Despite this tale of equipment, Burns had no great faith in the apothecary's healing powers, for after describing some unfortunate ministrations, he comments unkindly on the work of his brother mason:—

"That's just a swatch o' Hornbook's way;
Thus goes he on from day to day,
Thus does he poison, kill, an' slay,
An's weel paid for 't."

NINETEENTH CENTURY PHARMACY

BUT the dawn of a new era was at hand. The foundation of the Edinburgh Society did much to foster professional ideals. John Duncan started business on the North Bridge in 1818, and the high standard of his work helped to raise the whole level of pharmacy in the city. Since that time Edinburgh has been associated with many great names—men like David Brown, famous in connection with the manufacture of morphine, and Thomas Smith, celebrated for his work on the production of fine chemicals. Nor did other Scottish cities lag behind. The Aberdeen Society of Chemists and Druggists was founded in 1839, and in the same year the Edinburgh Pharmacopœia was first published in English, a step which doubtless marked a real contribution to the development of the new pharmacy and governed Scottish practice till the issue of the first British Pharmacopœia. In this connection there must be given an honoured place the name of Professor Christison, whose outstanding research work, together with the Commentaries on the Pharmacopœias of Edinburgh and London, published in his Dispensatory of 1842, so admirably fitted him for the chairmanship of the Committee of the General Medical Council charged with the preparation of the Pharmacopœia in 1864. 1851 saw the foundation of the North British Branch of the Pharmaceutical Society, which played an important part in securing the application to Scotland of the Pharmacy Act passed in the following year.

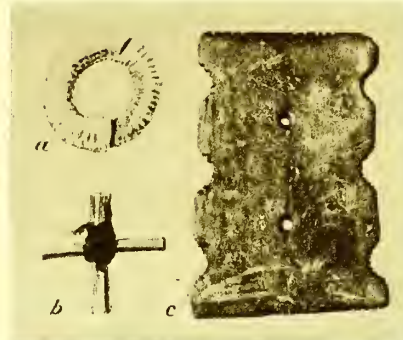
Many celebrated preparations have had a Scottish origin—Gregory's powder, Hamilton's pill, and, in later years, Easton's syrup—though Caledonia has never produced a "best seller" of the calibre of James's powder, which in the eighteenth century was sold indiscriminately in England—"to peers for smallpox, to puppies for distemper." And may not the chemist of our own regulated day reflect that truly there is nothing new under the sun? There has always been a zeal in high places for inspection of the druggists' shops.

Authorities Consulted

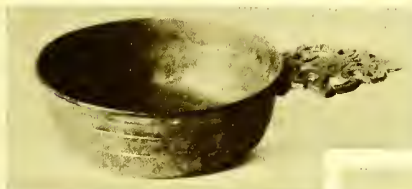
- "History of Scottish Medicine." Dr. J. D. Comrie. 2nd ed. 1932.
- "The Royal College of Surgeons of Edinburgh: Historical Notes, 1505-1905." C. H. Creswell.
- "Pharmacy in Scotland: A Retrospect." David Harley. "Phar. Journ." 1901, p. 6.
- "Royal College of Physicians of Edinburgh: History." Peel Ritchie.
- "Memorial of the Faculty of Physicians and Surgeons of Glasgow, 1599-1850." A. Duncan.
- "A Historical Account of the Rights and Privileges of the Pharmacy in Scotland: A Retrospect." Eccles. 1707.
- "Progress of Pharmacy." Bell and Redwood.
- "Arcana Fairfariana." Mawson, Swan and Morgan, Newcastle. 1890.
- "Accounts of Lord High Treasurer of Scotland."
- "Ancient Gaelic Medical Manuscripts." George Mackay, "Caledonian Med. Journ.," October, 1904.



RELICS OF ANCIENT SCOTTISH MEDICINE



Left, above, a prehistoric trephined skull of young woman from Rothesay, Bute, showing frontal opening. Centre, jet necklace found with skull. Right, charms against disease including: (a) goose's thrapple against whooping cough, Galloway; (b) cross bound with red wool; (c) carved stone, Islay



Barber's bleeding dish

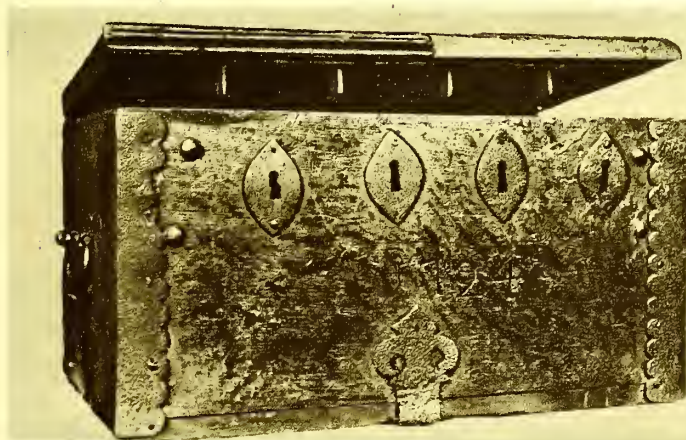


Folding medicine spoon from Traprain Law



Shetland cupping horns

On right, one of the Gaelic MSS. in the National Library at Edinburgh, containing recipes and other matter. Bound in deerskin



Left, treasure chest of the Society of Barbers for preservation of documents. Right, replica of mortar of the celebrated Gilbert Rose. (Royal College of Surgeons, Edinburgh)

From National Museum of Antiquities of Scotland (except articles at bottom)

ABERDEEN

Scenes in the Granite City



The Girdleness Lighthouse, at the Harbour Entrance



Union Street, the City's first thoroughfare



The Market and City Cross in Castle Street



A view in the Harbour



Catches in the Fish Market



The Old Bridge of Dee. Said to have been commenced in 1525 by Bishop Elphinstone

Photos, F. W. Hardie



'TWIXT DON AND DEE
Notes on Aberdeen Old & New

The Host City of the 1932 Conference

THE city of Aberdeen baffles the makers of epigrams; its beauties and its activities are so various that brief descriptive phrases fail to convey its charm. William Dunbar, describing a royal visit in 1511, wrote:—

“Blithe Aberdeen, thou beryl of all tounis,
The lamp of beauty, bounty, and blitheness,”

an effort which would have been more passable if he had not fallen into the weakness of duplicating his "blithe" at one remove. Defoe, in the third volume of his "Tour Thro' the Whole Island of Great Britain" (1727), devoted six pages to a description of Aberdeen and its industries, which evidently made a considerable impression on him. He commented:—

" But the Generality of the Citizens Houses are built of Stone four Story high, handsome Sash-Windows, and are very well furnish'd within, the Citizens here being as gay, as genteel, and, perhaps, as rich, as in any City in *Scotland*. . . . There are several other Buildings which should be describ'd, if our Work was to dwell here . . . all which, considering what Part of the World they are in, are really extraordinary. . . . In a Word, the People of *Aberdeen* are universal Merchants, so far as the Trade of the Northern Part of the World will extend."

Lengthy discussions have taken place over the etymology of the city's name, and between the conflicting opinions advanced by local experts we do not attempt to choose. According to some, it signifies "the town at the mouth of the Dee"; according to others, "the town at the mouth of the Don"; or it may stand for

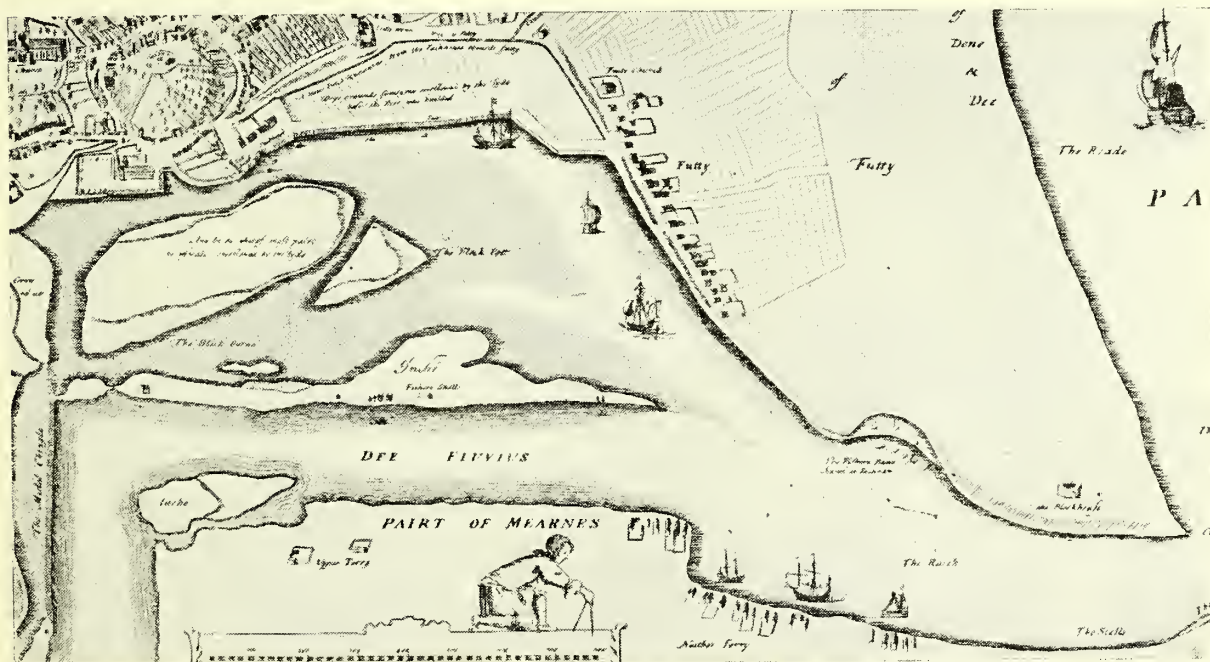
"the hill in the marsh" or for "the marsh of the Dee." Whatever explanation is favoured, the early history of the city is merged in that of the county.

MUNICIPAL HISTORY

WITH the founding of a bishopric about the year 1150 and its confirmation by a papal bull in 1157 we reach firmer ground. The first charter of the city, still preserved in the archives at the Municipal Buildings, was granted by King William the Lion between 1171 and 1185; the insertion of a date in a document of this kind was not usual at that time, and the possible limits of the years have been ascertained by inference from the names of the witnesses. The population in 1400 was about 3,000, in 1600 about 7,500, and at the census of 1801 27,608. Those who have time to delve into the "Records of Old Aberdeen" issued under the auspices of the New Spalding Club will find a good many matters of interest. Glancing through the extracts from Council minutes, for instance, we notice that on January 2, 1603, the price of candles was fixed at 4d. per lb., and that there were upward limits for the prices of ale and beer:—

"Item it is statuut that na darrer [i.e., dearer] aill be sauld within this toun nor xvj d. the poynt and the beir for xvij d. the poynt ilk persoun contrauenit to be vnlayit for xx s."

On March 5, 1677, a certain Patrick Rankin was admitted drummer for six months, at a salary of twenty Scots merks "and a frie litle chamber" for the period; his duty was to beat the drum daily "at fyve houres



PART OF GORDON'S PLAN, SHOWING "URBS ABREDONIA—THE NEW TOWN OF ABERDEEN"

in the morning and seven houres at night as also at all others tymes he sall be ordered be the magistrates." About this time the problem of dogs in church was exercising the Kirk Session; on October 17, 1641, it was "ordainit that quha ever did bring any doggs to the kirk" should pay 6s. 8d. Nearly forty years later, it was intimated that dogs were to be excluded from public worship, and "the sd. day it was ordered by the Minister and Session that to prevent any noise by dogs Georg Donald in this toune should haue ane groat out of the Collection every Sabbath for to hold them out of the Church."

EVENTS OF SEVEN CENTURIES

ABERDEEN shared in many stirring events that form a part of the history of Scotland. In 1297 Wallace surprised the garrison of Edward I in Aberdeen Castle, though his attack was repelled; and according to one account he burnt 100 ships in the harbour. In 1411 the efforts of Aberdonians and others were successful in stemming an invasion by Donald, Lord of the Isles, at Harlaw, where in a fierce battle Sir Robert Davidson, provost of Aberdeen, was killed. A suit of armour believed to be his occupies a conspicuous place in the vestibule of the Municipal Buildings, and his tomb is in the Church of St. Nicholas.

The participation of Aberdeen in the outbreak of 1715 began in September of that year with the proclamation of "King James VIII" at the city cross by the Earl Marischal. The church bells were rung, and the city was illuminated at night. The requisitions for money and supplies that followed were received, perhaps, with less enthusiasm. In the Jacobite rising of 1745-46 the city was occupied by the insurgents for five months. This time loyalty to the reigning sovereign predominated, and the rebels found that the provost refused to drink the health of the Pretender; they thereupon "poured the wine down his breast," caused the bells to be rung, and threw open the prison doors. The city was compelled to contribute to the rebel funds; after negotiation, the matter was compromised by the payment of £1,000 in settlement of all such claims.

The opening of the nineteenth century saw considerable changes in the layout of the city, which, unlike other important Scottish cities, had never had a main street of any account. An Act of Parliament was obtained in 1800 for making two principal streets, now known as Union Street and King Street, and work was commenced in the following year. Owing to difficulties in levelling the ground and other causes, the cost of this bold venture turned out to be greatly in excess of the estimate; something like a state of bankruptcy obtained in the city's finances for a few years, but before long the situation improved, and this well-considered example of town planning was found to be fully justified. Lying between the sea and a moorland, Aberdeen has, for centuries, had a considerable export trade in corn, pork and textile fabrics of several kinds. To these was added the fishing industry, followed later by granite, the durability of which is well shown in Union Street. A remarkable feature of "the granite city" is that this almost exclusive use of local granite as a building material has not resulted in a dull monotony; a few minutes' investigation in the western suburbs will disclose some charming effects obtained by the use of stone of different colours and textures. A statistical account of the city drawn up in 1839 states that there were then twenty-seven physicians, forty-seven surgeons, four dentists, and twenty-five "apothecaries and druggists."

KING'S COLLEGE

THE University of Aberdeen consists of two colleges, the older of which is King's College, situated about a mile from the centre of the city. The college owes its foundation to Bishop Elphinstone, who in 1494 obtained Papal permission to establish a "studium generale" in his see. The deed of foundation (1505) specifies the duties of the original members, thirty-six in number. The interest of King James IV of Scotland in

the enterprise led to the renaming of the college of St. Mary, as it was first called. The handsome crown surmounting the tower was rebuilt in 1636. From the opening of the college, one of the teachers was a "mediciner"; this was the first university recognition of the subject in Great Britain. As is well known, many men included medicine in their university curriculum in the sixteenth and seventeenth centuries without any intention of adopting it as a profession. In the absence or scarcity of medical practitioners in country districts, such knowledge was of value. King's College can show many distinguished names in medicine; those of chief pharmaceutical interest are certain members of the Gregory family, which in all gave sixteen professors to Scottish universities. The first, James, though he never taught at Aberdeen, was a graduate of that university; his subject was mathematics, and he died in 1675. Of the four medical Gregorys, James (son of the mathematical professor) was mediciner at King's College from 1725 to 1732; James, his son, from 1732 to 1755; John, brother of James, from 1755 to 1764; and James, son of John and first prescriber of Gregory's powder, taught in Edinburgh from 1776 to 1821. The last-named was long remembered in the Scottish capital by his controversies with his colleagues, culminating in his thrashing Professor James Hamilton with his walking-stick and being ordered to pay £100 damages. He is said to have remarked that he would pay double for another opportunity. His son William became Professor of Chemistry in Edinburgh University, and devised a process for manufacturing morphine.

MARISCHAL COLLEGE

THE foundation of Marischal College by George Keith, fifth Earl Marischal of Scotland, on April 2, 1593, is evidence of the intellectual keenness of the Earl and his compatriots, for the King's College had then been in existence less than 100 years. Although it opened with a Faculty of Arts alone, its development was assisted by Parliament, the municipality and the General Assembly. The original building was demolished in 1840, and the erection of the present magnificent pile was spread over about sixty years. Over the inner door is inscribed a motto attributed to this same fifth Earl: "They haf said... Quhat say thay? Lat thame say." The great tower, 230 feet high, faces the visitor as he passes through the main gateway; and its doorway also gives entrance to the Museum, the Picture Gallery and the admirably proportioned Mitchell Hall. The last-named dates from 1895, and is widely known for its large stained-glass window, the pictorial scheme of which epitomises the history of the college. The academic staff of the college has not included any group quite so spectacular as the Gregory family; but Thomas Clark, M.D., who devised the well-known test for hardness in water, was appointed to the chair of chemistry in 1833, and Sir Erasmus Wilson, the dermatologist, founded a chair of pathology in 1882. Of the professors who in the eighteenth and nineteenth centuries practised pharmacy as doctor-druggists, one of the most noteworthy was George French, Professor of Chemistry. He stood in the ancient ways of science, and regarded Sir Humphry Davy as a dangerous person.

ROBERT GORDON'S COLLEGES

ROBERT GORDON, the founder of what was at first called Robert Gordon's Hospital, was born in Aberdeen in 1668. He was a member of a well-known Aberdeenshire family, and on the death of his father in 1680 inherited the sum of 20,000 merks, an amount which he increased by successful trading in Danzig. He had the reputation of being a miser and a misogynist; stories are told of him in this connection which, being probably for the most part apocryphal, need not concern us. The material fact is that by 1729 he had returned to his native city, and on December 13 of that year conveyed his whole estate to trustees for the purpose of founding an institution for the education and maintenance of boys. In the panelled board

room of the building—a magnificent example of eighteenth-century furnishing—there are two portraits and a terra-cotta statuette of Gordon, a brass plate beneath the statuette setting forth that he founded the Colleges by “deed of mortification.” A far-sighted provision in the deed ordained that the boys should continue in the Hospital till they were “fourteen, fifteen, or at most sixteen years of age compleat”; sums of money were provided for the subsequent apprenticeships (of five years) and for starting the ex-scholars in business on their own account. The Hospital was opened in 1750 for the admission of boys; the governors obtained a Charter of Incorporation in 1772 and a second Charter twenty years later.

Without following in detail the expansion of the Hospital during the nineteenth century, we may resume this brief outline with the modern developments that began with the grant of fresh powers in 1881. In that year the governors were authorised to convert the buildings wholly or partly into a college or day school and to admit boys other than the foundationers. The success of the new scheme was immediate. In August 1882 there was an attendance of 360, and the limit of 600 was reached two years later. Association with the University of Aberdeen soon followed, and additional classes (day and evening) were established from time to time. It is of special interest to know that the first additional day classes commenced as the result of repre-

satisfactory, as it allows great flexibility in the arrangements of seating. In the room is the epidiascope, and the walls are liberally furnished with wall maps and cases illustrating the manufacture of pharmaceutical chemicals.

The dispensing laboratory is equipped with benches with accommodation for thirty-two students, the benches being arranged on the “island system.” Each student is provided with a drawer and locker for his apparatus, and special apparatus is provided in drawers and cupboards around the room. Instead of the provision of movable stands for retorts, etc., each bench is fitted with a fixed stand with furniture of rings and clamps. This has been found to save much space in storage and to obviate a heavy percentage of breakage. Advantage is taken of the central low-pressure heating system, installed throughout the College, to build over a radiator a cupboard for the drying of drugs and apparatus. A combined water oven and still is fitted in the laboratory, with storage for distilled water under the oven. A distinctive pharmaceutical atmosphere is imparted to the laboratory by the specie jars and carboys on the wall fittings. An ornament of which the College is very proud is an old bell-metal mortar presented by Major E. Saville Peck.

The museum is supplied with a complete set of specimens of drugs, the collection of which involved contact with traders and consuls throughout the world. Every



“PROSPECT OF NEW ABERDENE FROM THE CORNE FIELDS A LITTLE BE NORTH OF THE CRABBE STONE”

Taken from Gordon's Plan

sentations by the Aberdeen Pharmaceutical Association.

Expansion of teaching has necessitated additional buildings, these now forming the four sides of a square. The schools constituting the Technical College are:—(1) School of Engineering; (2) Schools of Chemistry and Pharmacy; (3) Gray's School of Art; (4) School of Domestic Science; (5) School of Navigation. Besides the main buildings already mentioned, there is a block in King Street housing the School of Domestic Science. A hall seating 800, a reading room and a library form part of the newer structures at the College. The latest report before us, covering the session 1930-31, shows that the number of students receiving instruction was then 2,060, exclusive of seventy-two from other institutions; and that evening classes were attended by 989 students, of whom seventy-eight were occupied in pharmacy. In the School of Pharmacy (described in later paragraphs) 157 names were enrolled. The achievement of the College in university examinations is a distinguished one.

THE SCHOOL OF PHARMACY OF ROBERT GORDON'S COLLEGES

THE School of Pharmacy is located in the main range of buildings of the Technical College, which were completed in 1930.

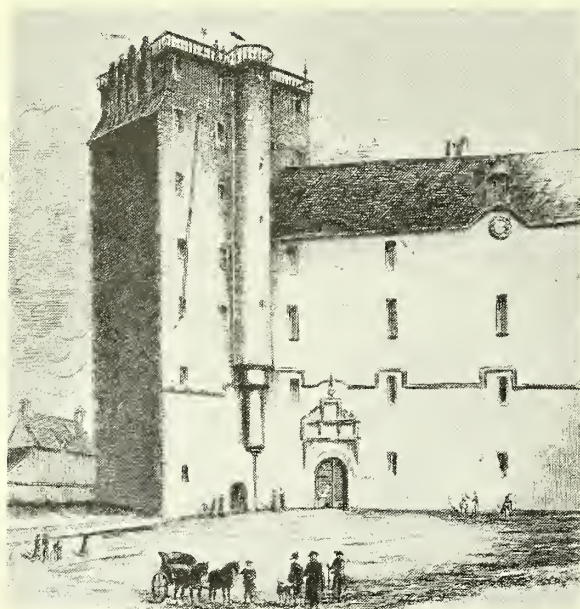
The lecture room, seating forty-five students, is furnished with chairs provided with note-pads. In practice this form of seating has been found to be most

care was taken to ensure the authenticity of each specimen before it was placed in the museum. In addition to the standard set, a full set of drugs is furnished for the use of students. The department is provided with a wide range of periodicals relating to pharmacy and botany.

The pharmaceutical technical laboratory is a large room with oblique roof lighting. The laboratory is furnished with a gas-heated multitubular steam boiler delivering steam to the evaporating plant, which consists of an enamelled evaporating pan, enamelled kettle, copper tilting pan, and a combined vacuum still and extractor. The drying plant comprises a vacuum oven and a steam-heated drying chest. The range of the other apparatus in the laboratory is indicated by the following list:—

Christy and Norris laboratory mill. Ball mill. Hunter emulsor. Hurrell homogeniser. Hydraulic press. Screw tincture presses. Bird alcohol-recovery still. Metafilter. Filter press. Bank of percolators. Electrically heated Soxhlet bath. Autoclave. Koch steam steriliser, electrically heated. Tablet machine. Centrifugal crystal dryer. Bottle-washing plant. Fume chamber with water, gas, steam and vacuum services.

Vacuum is supplied by an electrically driven pump, situated externally to the laboratory, and capable of regulation from starting gear in the room. The whole department is connected with an electrically driven fan, which may be started or stopped from any of the laboratories.



MARISCHAL COLLEGE BEFORE 1940

From an etching by Skene

The advanced laboratory is a smaller room fitted with centrifuges, electrically heated oven, sand bath, melting-point apparatus, and a Hyvac vacuum pump. The fume chamber is furnished with a stand and draught system for Kjeldahl work.

The botanical laboratory is furnished with a complete range of apparatus for the work of the Preliminary Scientific and Pharmaceutical Chemist courses. All the families of plants for the former course are illustrated by papier mâché models of plants by Brendl. The laboratory contains an electrically heated incubator, a dry heat steriliser and an electric centrifuge.

The staff of the Pharmacy Department is:—

Head of Department: E. G. Bryant, B.Sc., Ph.D., Ph.C.

Lecturer in Pharmacy: D. S. Rattray, Ph.C.

Lecturer in Botany: E. C. Barnett, B.Sc.

Lecturer in Bacteriology of Vaccines and Serums:

J. W. Tocher, M.B., Ch.B., D.P.H.

Assistant Lecturer in Pharmacy: A. J. Thorburn, B.Sc., Ph.C.

The Chemistry Department, in charge of Dr. W. Maitland, contains three laboratories for general chemistry, one for metallurgy, and one for paper testing, two lecture rooms and a preparation room. All the laboratories are equipped with the latest apparatus for carrying out the work of the school on the lines demanded by modern examinations.

The Physics Department, under Mr. John D. Stewart, M.A., has two laboratories, and in addition the pharmacy students make use of the mechanics' laboratory of the Engineering Department.

THE ROYAL INFIRMARY

THE Royal Infirmary, situated on Woolmanhill, in the heart of the city, was founded in 1739, and was opened two years later. The first part of the now extensive group of buildings was erected for the comparatively small sum (even on the scale of eighteenth-century values) of £500, and was surrounded by a garden with a hawthorn hedge. In its early days the Infirmary suffered from lack of funds; but about the year 1781 a dispensary, mainly for the benefit of the poorer inhabitants, was opened in connection with it. Within the Infirmary there was a "shop," which up to 1796 was in charge of a physician and two medical students; it was then suggested that a druggist should

be appointed to take charge. Not only was dispensing done there, but herbs from the three gardens attached to the building were also kept for sale.

By the beginning of the nineteenth century the building was being extended and a closer connection with the Medical School was effected. In 1826 the first clinical lectures in the Infirmary were delivered by Dr. Patrick Blair, not without disapproval on the part of the older physicians. Passing to later times, the Surgical Pavilion (erected in commemoration of Queen Victoria's jubilee) was opened in 1892, and the Medical Pavilion (enriched by a gift of £25,000 from Lord Mount Stephen) in 1900. The number of patients now treated annually is 6,293 in-patients and 25,578 out-patients (including casualty cases). The dispensary forms part of the Surgical Pavilion, and is under the supervision of Mr. J. W. Fraser, who qualified in 1923 and was appointed chief pharmacist in May 1927. A new building is in course of erection in the suburbs of the city at Foresterhill, being part of the Joint Hospitals Scheme for which over £480,000 was raised.

BUILDINGS AND BRIDGES

A FEW of the other buildings of interest must be mentioned, even in so brief and selective an account of the city as this is. Union Street, at whatever point it is entered, is always impressive—a unity without monotony. No better starting point can be chosen for sight-seeing than Castle Street, a continuation eastward of Union Street. Here will be found the Municipal Buildings, a handsome block at the corner of Broad Street completed in 1874. The council chamber is a stately apartment with numerous portraits and a panelled ceiling filled with coats of arms; the charter room houses a remarkably complete collection of records; and the tower, rising to a height of 200 ft., commands extensive views. In Castle Street, also, is the city cross, a six-sided structure of exceptional interest dating from 1686. From this point a journey may be made to King's College, St. Machar Cathedral and the Old Bridge of Don, locally referred to as "the Auld Brig o' Baggownie." The present cathedral, standing on the site of one assigned to the sixteenth century, was commenced about the year 1366. Though not large, it is austere and impressive, and has many features of interest. The bridge is said to be the oldest structure of its kind in Scotland still in use for general traffic. Its erection is ascribed to Bishop Cheyne, a fourteenth-century prelate whose revenues, having accumulated during his enforced absence, were put to this useful purpose.

Returning to Union Street, the visitor will notice, about midway in its length, the East and West Churches of St. Nicholas, pointed in opposite directions from a central tower surmounted by a spire. The beginnings of these historic buildings are traced to about the year 1200; they have had various vicissitudes, and the West Church contains some remarkable carving and communion plate. A short walk brings one to the Art Gallery, Cowdray Hall and War Memorial, a handsome block of buildings erected between 1885 and 1925. Lavish generosity has been shown by Lord Cowdray and other donors in providing an ideal home for the city's art treasures.

The docks and the fish market constitute a very important part of the city's trade. As is generally known, Aberdeen is one of the two or three largest ports in respect of the quantity of fish landed, and its foreign trade is considerable. Turning inland, it will be seen that the Dee is spanned by three bridges in addition to one carrying the railway; the most interesting of these is the Old Bridge of Dee, commenced by Bishop Elphinstone and completed by Gavin Dunbar, the next but one in succession to the see. An inscription gives the date as 1525. A chapel containing a statue of "Our Lady of Bon Accord" once stood at the north end of the bridge, and the words "Bon Accord" are still in the city's coat of arms. Everyone who has the time should visit Hazelhead, at the west end of the city. This is a wooded estate of about 800 acres recently purchased by the Corporation.



Front of Robert Gordon's College



The Pharmacy Laboratory in Gordon's College



Aberdeen Colleges and Halls

Below, left, Interior and exterior of the splendid Marischal College, founded in 1593. The present building was completed about 1900



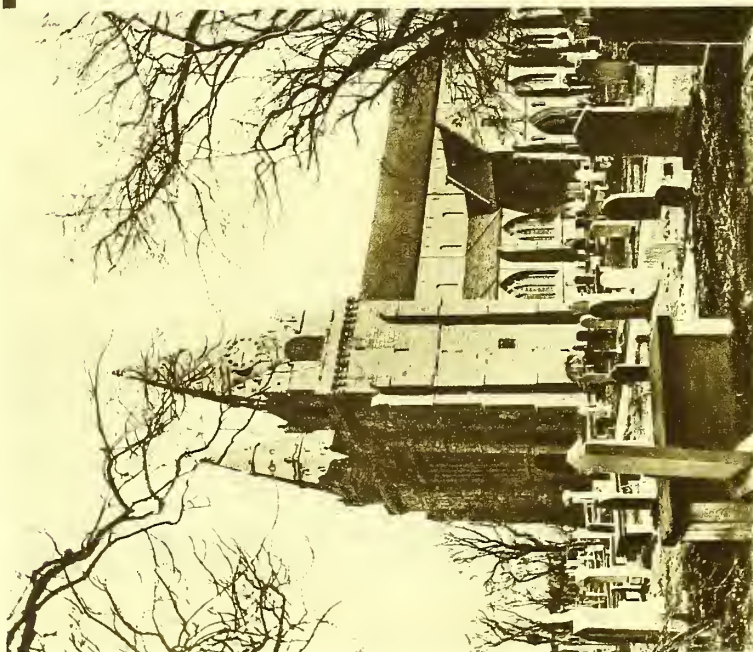
Tower of King's College, Aberdeen University. Founded in 1494. This crowned tower was rebuilt in 1636



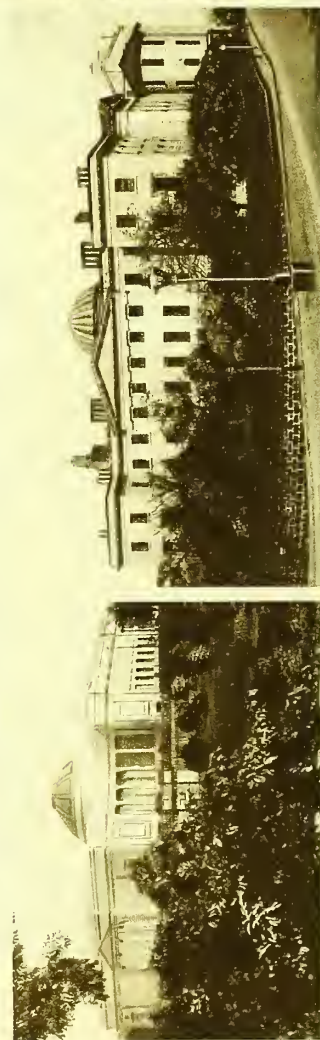
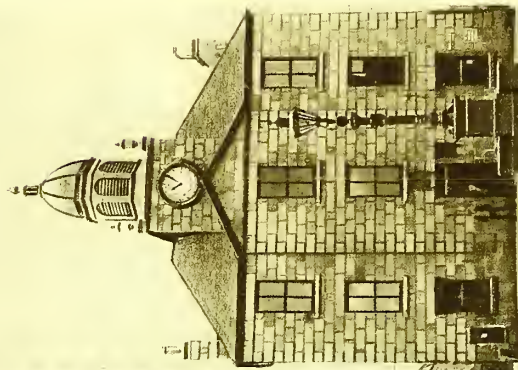
Interior and Exterior of Trinity or Trades Hall

Photos: F. W. Hardie

Public Buildings in the City

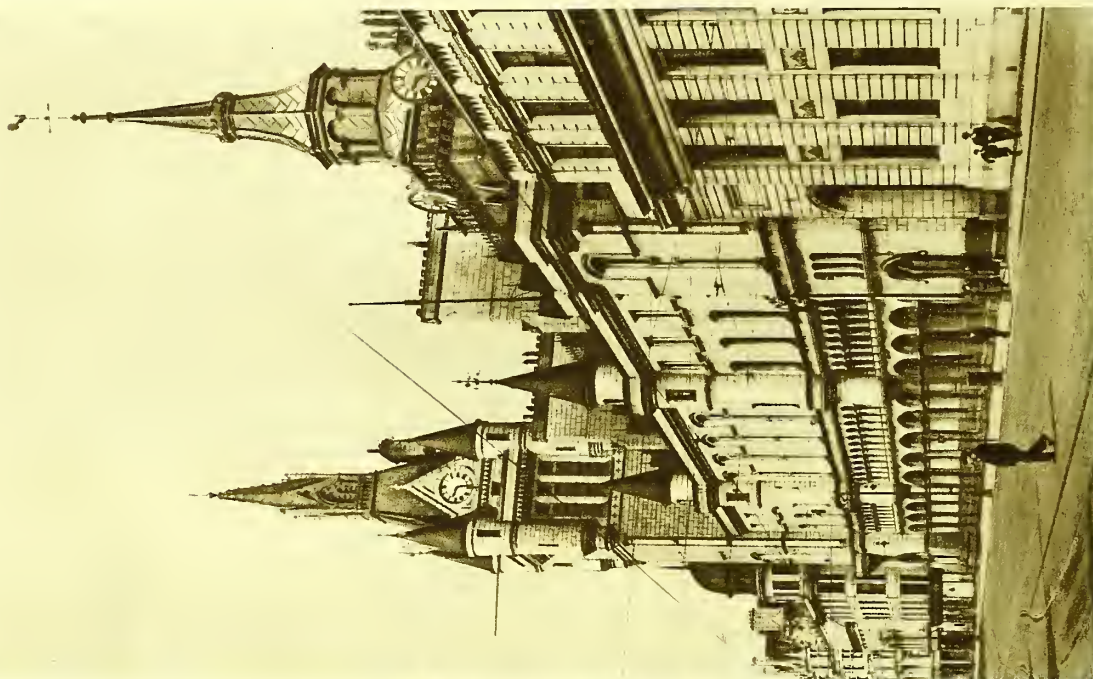


Left The Cathedral of Machar. Dating from the 14th Century. Only the nave remains of the original building. Right, The Old Town House in Old Aberdeen



Left, The Art Gallery and War Memorial Court. Centre, The Royal Infirmary on Woolmanhill. Right, The handsome Municipal Buildings and the Old Toll Booth in Castle Street

Photo, F. W. Hardie





PHARMACEUTICAL INDUSTRY IN SCOTLAND



IT is appropriate that the centre of the Scottish pharmaceutical industry should be also a world-famous seat of medical teaching and practice. Many famous men have studied in Edinburgh, and to the capital medicine is indebted for such names as Christison, Gregory, Syme and Simpson, to mention only a few, while manufacturing pharmacy owes much of its progress to such pioneers as Duncan, Macfarlan, Thomas Smith, and many others. The wholesale side of the craft, however, is not confined to Edinburgh; such centres as Perth, Dundee, Aberdeen and Glasgow contribute their share. It was recently the privilege of a CHEMIST AND DRUGGIST representative to visit Scotland and to call on most of the well-known manufacturers, with the objects, first, of obtaining interesting historical information and, secondly, of describing briefly present-day manufacturing activities.

THE first few days were spent in Edinburgh, and an early opportunity was taken of visiting the well-known premises of

J. F. Macfarlan & Co.

Like many other world-famous firms of manufacturing chemists, this business had its origin in a pharmacy of the old school, a pharmacy where medicaments were prepared from the raw materials, and not merely dispensed or retailed, as is the general rule to-day. The firm takes its name from John Fletcher Macfarlan, who, born towards the end of the eighteenth century, took over in the early years of the nineteenth an Edinburgh pharmacy founded in 1780. Being a clever pharmacist and a far-seeing man of business, he appreciated the importance of the chemical progress which was then being made. Many active principles were being isolated, and new compounds were being added to the *materia medica* of the time. He held the diploma of the College of Surgeons of Edinburgh, was a baillie of the City, and became acquainted with many notable characters of his day, among them Lord Macaulay. His realisation of the possibilities which the progress of an exact chemical science held out led him to avail himself of the services of David Rennie Brown, a man of great and accurate chemical knowledge and inventive capacity. Under the influence of the business capacity of the one and the technical skill of the other the manufacturing side of the business developed steadily.

Morphine was first isolated by Sertürner in 1816, and Dr. William Gregory, of Edinburgh University, worked out a laboratory process for the manufacture of the muriate and convincingly showed its many advantages over opium or laudanum. The firm has in its possession a copy of this paper of Gregory's bearing the following note in the handwriting of David Rennie Brown:—"This very short paper by Gregory put into my hands by the late J. F. Macfarlan was all the instruction I got from him towards the manufacture of morphine and its salts." It was very shortly after the appearance of Gregory's paper in 1832 that the firm began to turn out morphine muriate and acetate in a pure state and on a commercial scale. D. R. Brown, the first, was responsible for this, gradually altering Gregory's process and devising the necessary plant. Opium proved to be the "coal tar" of the pharmaceutical trade, and many alkaloids were isolated from it.

Almost equal in importance to morphine is the alkaloid codeine which, though discovered in 1832, was not in general use until many years later. It is worthy of note that it is the basis of this alkaloid that is still chiefly used, in the form of large prismatic white crystals, as originally produced by Macfarlans, although there seems to be no good reason why its salts should not be employed, as is the usual practice with other alkaloids. Another curious circumstance is that codeine never seems to have taken its proper place in this country, the amount used being negligible as compared with the consumption of continental countries. The general export demand for codeine became so great that attempts were made to synthesise it from morphine, and these eventually succeeded, although there was considerable controversy before it was admitted that the two products, natural and artificial, were identical. Apomorphine, first discovered in 1869, proved an invaluable addition to *materia medica* as an emetic and expectorant. Macfarlans were the first to make it on a commercial scale, and are still, it is understood, the only British manufacturers. Its place, however, has largely been taken by other drugs. Diacetyl morphine and ethylmorphine were first fully and systematically investigated by Stockman and Dott in 1887 and 1888, and supplied by the firm under their systematic names, but were later registered by continental firms, and their identity was in a large measure obscured until the war, when their true relations became manifest. One of the earliest observed alkaloids of opium is narcotine, which itself has little hypnotic value, but is interesting on account of the number of compounds which have been prepared from it. The chief of these is the alkaloid cotarnine, discovered by Wöhler, which Macfarlans were the first to prepare commercially. Its constitution was investigated by Perkin and D. R. Brown (the third). In the form of hydrochloride and phthalate it has been largely used as a styptic. In recent years the firm has maintained its interest in opium products, and has produced Opoidine, a mixture of the alkaloids in constant proportion and in a pure state. No explanation is needed of the advantages of absolute equivalence of doses and of injectability which the preparation offers. Further, in it considerably smaller doses of morphine are stated to be effective, in many circumstances, than when given alone. A survey of the firm's work on opium alkaloids would not be complete without reference to the research work of D. B. Dott.

Opium alkaloids, however, are not the only products in which the firm has taken an interest. The first D. R. Brown kept before him the general question of the extraction of active principles. For example, when

beberine was introduced by Sir Douglas MacLagan as an antiperiodic, D. R. Brown set himself to satisfy the demands for this alkaloid, devising and

erecting extensive plant for extraction, evaporation, drying and scaling. The industry to-day owes much to men like him, who, when chemical engineering was practically an unknown study, planned and erected such plants, capable of producing successfully large quantities of products previously prepared only in experimental amounts.

Since the recognition by Sir James Young Simpson of the "blessing to mankind that lurks in the sweet vapour of chloroform," the firm has assiduously striven to bring this product ever nearer to perfection in purity

Edinburgh Houses



Edinburgh Houses—cont.

and stability. The great importance of the purity of chloroform for anæsthetic use was early realised, and they experimented with many methods of purification, including distillation *in vacuo*. D. R. Brown, it is stated, was the first to observe the preservative action of alcohol on chloroform. A prejudice existed for many years in favour of chloroform prepared from rectified spirit. It was long before practitioners in general realised that chloroform, however prepared, if properly purified, was all that could be desired. The manufacture of ether in quantity was commenced even before that of chloroform, and since its use in anæsthesia became general the firm's brand has been well known. The same patient investigation and research has been brought to bear on its production as on that of chloroform. Macfarlan's chloroform and ether are of the highest quality and are used in all parts of the country. The chloroform was largely used by Lister throughout his hospital practice, while he was inaugurating and perfecting the system of surgery with which his name will always be connected. The ether was used by the noted ovariotomist, Dr. Thomas Keith, throughout his long professional career, and is now used in a large proportion of hospitals and infirmaries throughout the country. In the sixties D. R. Brown was joined in the management of the firm by his son David; and with him and the firm Lister worked in full confidence. Under his direction and frequent personal supervision the first antiseptic dressings and materials were prepared in an efficient and satisfactory form. In fine chemical manufacture the firm has shown a degree of progressive activity and solid achievement. Among the products which it manufactures on a large scale may be mentioned chrysarobin, salicin and strychnine, for the manufacture of which there are extensive plants in their modern factory at Northfield, Edinburgh.

The buildings first used for manufacturing activities were at Abbeyhill, Edinburgh. To begin with they consisted of a little more than the sheds left on the ground by the contractor for the construction of the adjacent railway. With expansion of activities, additions have been made, until, at the present day, the ground is almost inconveniently crowded with buildings. D. Rainy Brown, grandson of D. Rennie Brown, and so the third of the name in direct succession, became a partner in 1901. He was a Fellow of the Royal Society of Edinburgh and a member of the Edinburgh Merchant Company. Energetic and entirely sympathetic to new ideas, he took the initiative and secured ground at Northfield, upon part of which new premises were erected, planned for the purpose for which they were intended and leaving room for expansion.

On the commercial side, most of the English and the considerable export business has for many years been controlled from the London office, formerly at Moor Lane and now at Bethnal Green Road, while the wholesale department and office at Abbeyhill deal with Scottish, North of England and Irish grounds. The firm has been fortunate in having a succession of highly competent men to control its commercial affairs; of these, mention should be made of Mr. James R. Young and Mr. Alexander Macdonald. Since the death of Mr. D. Rainy Brown the third, in 1921, the affairs of the firm have been managed by Mr. A. S. Birnie and Mr. T. J. Johnston, who are now assisted by Mr. D. R. Brown, the fourth, who joined the staff in 1927, after taking a degree in science at Cambridge.

LEAVING Macfarlans after a most interesting visit, our representative walked the short distance to Holyrood Road, where he had little difficulty in finding the premises of

Duncan, Flockhart & Co.

The history of this well-known house is one of the most interesting in the drug trade. Over a century has passed since the founder, John Duncan, opened his first business in Perth in 1806; he was born in 1780. At the

age of fourteen he commenced to serve his apprenticeship to a leading druggist in the Lawnmarket, Edinburgh, and on its completion, he proceeded by sailing ship from Leith to seek experience in London. The exact date of his arrival is unknown, but an old pocket-book remains, on the cover of which it is stated that in 1804 he was with the firm of Kernoth, druggists, Bear Street, Leicester Square.

Having by this time acquired sufficient experience and desiring to commence business on his own account, he decided to settle down in Perth. A new druggist from London in those days caused something of a sensation in the fair city, and his customers were agreeably surprised at the neat and tidy way which he adopted in handing out his wares. For a time he was careful as regards expenses, even sleeping under his counter ready to attend to the numerous night calls. His business continued to make progress, and he managed to secure a double-fronted shop next to Parliament Close, where it was his practice to manufacture as much as he could. Mr. Duncan was now established in a first-rate business, and he took one of his assistants into partnership, the firm becoming known as Duncan & Ogilvie.

After repeated visits to Edinburgh Mr. Duncan resolved to purchase premises, and these he ultimately secured at North Bridge. As the business increased he took into partnership two young men who had been trained under his care and, as he had given over the Perth business to Mr. Ogilvie, he discontinued the name of "Duncan & Ogilvie" in Edinburgh, and substituted, in 1832, "Duncan, Anderson & Flockhart." After a short time, however, Mr. Anderson left for abroad as a surgeon in the Turkish Army and was killed in action. In 1833 the name of the firm was changed to Duncan & Flockhart, and in 1836 to Duncan, Flockhart & Co., its present designation. Mr. Duncan was a man who held the esteem of his friends and customers among whom was Sir James Murray, the inventor of fluid magnesia. In the preparation of this popular medicine Mr. Duncan had assisted, and in return for this Sir James Murray was the means of securing for the firm the appointment of Chemists to the Queen.

Mr. Flockhart, like Mr. Duncan, was a native of Kinross-shire; he served his apprenticeship at 52 North Bridge, and eventually became a Licentiate of the Royal College of Surgeons, but never practised; it was the custom in the days before pharmaceutical qualifications for the senior assistants to become Licentiates. When Mr. Duncan felt the time had come to retire from the active management of the business he resolved to divide his share among four of the senior assistants, Newton, Macfarlan, Hunter and Tait, so that Mr. Flockhart remained the senior partner. Professor James Young Simpson, who was responsible for the introduction of chloroform into medicine and surgery, was a frequent visitor to the company's laboratories, where the chloroform was made with which he conducted his experiments; with the manufacture of chloroform the name of the firm has ever since been honourably associated. Until 1837 the laboratory and manufacturing department was carried on in the arches of North Bridge, but in 1873 new premises were erected in South Canongate to which the manufacturing and wholesale departments were transferred. The West End retail branch was opened in 1845. Space will not permit of a detailed history of the partners in this famous business during the past sixty years, such men as Hunter, Tait, Simpson, Buchanan, Heron, Dick, Noble, James L. Ewing, Inglis Clark and Andrew Hunter. The present partners are as follows:—James L. Ewing, LL.D., Wm. Inglis Clark, D.Sc., Andrew Hunter, W. T. Ewing, M.A., D.S.O., H. J. Baker, and J. J. Blackie, A.I.C., Ph.C.

The present manufacturing premises at 104-108 Holyrood Road, Edinburgh, are spacious and admirably suited for their purpose; in addition, the company maintains grinding mills and stores at Calton Road, bacterial laboratories at Bristo Place, and the well-known Pharma-Farm at Warriston, near Edinburgh. The London warehouse and offices are centrally situated at 155 Farringdon Road, London, E.C.1. At Holyrood Road a



Edinburgh Houses—cont.

great variety of processes is carried on in the production of chemicals and pharmaceuticals. The most prominent feature of the manufacturing side is the plant devoted to the preparation of anaesthetics—chloroform, ether and ethyl chloride—which comprises the most modern and up-to-date methods of production. In the laboratories galenicals, tablets, pills, organo-therapeutic preparations, capsules and many specialties are made. The steam laboratory contains a wide range of stills and evaporating pans, including four copper-lined pans and three of block tin. The tincture room is equipped with series of 20-gallon percolators set up for a process of repercolation. In the analytical department all materials are tested before purchase; the equipment is up to date and includes a Seitz germicidal filter, which is used chiefly for filtering solution of adrenalin. On the floor above is pill and tablet making machinery. In the packing room girls are employed packing a large variety of chemists' lines, including "own-name" goods, ointments and creams. Nasal and ophthalmic capsules are filled by hand; these capsules are made of gelatin and are supplied in a variety of combinations. Duncan's flexible gelatin capsules are, of course, well known; the gelatin wall is hand-made and therefore readily soluble. On the first floor there are poison cupboards, D.D.A. room, steam drying tables, vacuum and pressure pump, alcohol recovery stills and a hydraulic press.

This brief description of an important house would be incomplete, perhaps, without some reference to the vaccines and tuberculin prepared by the research laboratory of the Royal College of Physicians, Edinburgh, and distributed by Duncan, Flockhart & Co.

THE next call took our representative some little distance out from the centre of Edinburgh to the district of Gorgie, where he was cordially received at the works of

T. & H. Smith, Ltd.

For over a century this historic house has carried on business in Great Britain and in all the principal countries of the world. In 1927 it celebrated its centenary, and in that year published a brochure giving interesting details of the rise of the business from small beginnings in the retail pharmacy at 21 Duke Street, Edinburgh to the present position at Blandfield Chemical Works, situated in the comparatively new industrial district of Gorgie, about two miles from the centre of Edinburgh. These works were purchased in the autumn of 1906, and after having been adapted for use as an up-to-date chemical factory were gradually occupied during 1908. The area covered is about four acres, and space has been fully utilised by the erection of high buildings specially adapted for the manufacture of the different alkaloids and fine chemicals in which the company specialises. In addition to these, large galenical laboratories, elaborately fitted up for the manufacture of all pharmaceutical drugs, are maintained. Power is almost entirely electrical; steam, however, which is used mainly for heating stills, extractors, etc., is provided by a battery of four large boilers, alongside of which is situated an economiser used to raise the temperature of the feed-water almost up to boiling point by automatically passing the hot gases from the flues over large tubes containing the water, which is then fed directly into the boilers. The quantity of coal consumed averages twelve tons per day. A prominent feature of the works is the number of experimental laboratories situated in the different departments, all of which are under the control of skilled chemists. It is hardly necessary to enumerate the alkaloids and fine products manufactured by T. & H. Smith, Ltd.—they are already so well known—but mention might be made of some of the more prominent ones, viz., morphine, codeine and all the other opium alkaloids, aloin, santonin, caffeine, strychnine, ephedrine and their various salts. Chloro-

form has also been one of the company's special manufactures practically since its introduction as an anaesthetic. Of recent years packed drugs have formed a considerable feature of the output, and a large portion of the warehouse is now devoted to this purpose. The Glasgow depot is situated at 32-34 Virginia Street, in the premises taken over from the Glasgow Apothecaries Co., Ltd., and from there customers in the west of Scotland are served, mainly by motor transport. The building was specially built for this class of trade, and is equipped with the latest devices for quick service. The London house, situated at 25 Christopher Street, was built and specially designed for serving the English and export trade, and from there the company's products are distributed all over the world, and its interests are represented by more than thirty sales agents domiciled in the principal centres of almost all the more important countries abroad. In many cases orders are promptly executed from stocks in the hands of the agents.

THE journey to Gorgie served a double purpose, and after a few minutes' walk our representative arrived at the works of

Duncan McGlashan, Ltd.

The Abdine Works are situated at Westfield Road, and it is here that the firm of Duncan McGlashan, Ltd., make their Fountain brand of laxatives, head powders, etc. Mr. Duncan McGlashan, M.P.S., L.D.S., the founder, is a worthy example of how to keep young, for although he has several years more than four-score to his credit, he goes to business daily, and takes as keen an interest in matters technical as when he taught anatomy at the Royal College of Surgeons, Edinburgh, in earlier days. "Health" appears to be the watchword of this firm from the selection of goods they market down to the fresh-air conditions in which they are made.

AFTER a short ride on a Corporation omnibus (an extremely useful form of transport in Edinburgh) our representative found himself at the gates of Castle Mills, the premises of

The North British Rubber Co., Ltd.

This well-known business originated in 1856, when a small syndicate known as Norris & Co. started the manufacture of rubber products in a former silk factory which is now known at home and abroad as Castle Mills. In 1857, when the Joint Stock Companies Act came into force, the firm of Norris & Co. was formally dissolved and the present title substituted, and at the same time a policy of expansion was introduced. By 1888 the business had reached the maximum allowed for by its constitution; the old company was then wound up and a new one formed with increased capital. About this time great inventive activity was manifest at the works and many novelties and improvements in the manufacture and uses of rubber were introduced. During the war the company rendered inestimable service by the production of equipment which included, our representative was informed, millions of ground sheets and trench boots. The product of Castle Mills best known to chemists is, perhaps, the North British hot water bottle. Although fabric reinforced bottles are still made, the moulded type has the advantage in that it can be manufactured in a wide variety of colours and designs. Another important line is vulcanite combs, of which the company is one of the largest makers in the country. Druggists' sundries, including sponge bags (in endless variety), water beds, pillows and cushions, douches, air pillows, vulcanite fittings, celluloid developing dishes and rubber corks are among the many products of Castle Mills. Particular mention should be made of waterproof sheeting for which the company is a contractor to many official bodies, hospitals, and other institutions in all parts of the world, and the "Scottish Proofing" is very well known for its durability and cleanliness.



Edinburgh Houses—cont.

ON the way back to Princes Street some interesting information was gleaned at 12 Torphichen Street, the headquarters of

The Distillers Co., Ltd.

This very important concern, commonly known as D.C.L., had its origin in Scotland, although its ramifications now extend to many parts of the world. The company has large interests in the whisky trade through its numerous distilleries, and is associated with the great whisky concerns of Haigs, Walkers, Dewars and Buchanans. The D.C.L. is also interested in the yeast business, being one of the leading concerns manufacturing in the United Kingdom. The products of the company which are of particular interest to chemists are, however, rectified spirit and malt extract. The malt extract works are situated in ideal country conditions at Kirkliston, near Edinburgh, where every facility is afforded for the production of high-grade malt extract for pharmaceutical requirements. The factory is modern in every respect and the process of manufacture is under the care of skilled chemists. The D.C.L. was founded about fifty-five years ago as a comparatively modest venture, but it is now one of the largest corporations in the world.

THE next call took our representative to a very romantic corner of Edinburgh where he found, on the site of a former kirk manse, the modern works of

G. F. Merson, Ltd.

St. John's Hill Works is the centre of an industry which, although it cannot be classed as pharmaceutical, is a direct offshoot of pharmacy and is of considerable interest and importance to chemists. When our representative called at the premises he was cordially received by Mr. G. F. Merson, who is the founder and managing director of the company. During the war it became evident that the British stock of surgical catgut was running out and that there was no organised home manufacture from which fresh supplies might be drawn. Mr. Merson began to experiment in Edinburgh, and before the war came to an end he and his assistants were supplying sterile catgut in great quantities to British hospitals at home and abroad. This was the beginning of the business which is now carried on, under Mr. Merson, at St. John's Hill, the old-world gardens of which have been built upon to provide the necessary accommodation. In this very romantic corner of Edinburgh the visitor cannot fail to mark the contrast which he obtains from the windows with the modern spirit within—the atmosphere as of an operating theatre; the white dresses of the workers and the scientific mind and eye controlling all that is done. The most important property of catgut, from the point of view of the surgeon, is its complete sterility; there are other considerations, of course, such as tensile strength and the persistence of the gut in the human tissue, but it is sterility that has the surgeon's chief interest. The gut used at St. John's Hill works is taken from mountain sheep of the North of Scotland, animals which feed on the little lawns of grass found among the heather and ferns. The smaller and more hardy mountain sheep yield, we understand, a tougher and more tensile gut than that of the lowland fed animals, and, at the same time, there is less risk of contamination from ground which has never been cultivated. The gut, although possessing a high character to commence with, is treated as though it has a bad reputation and is passed through all the stages which lead up to a condition of complete sterility. After sterilisation of both inner and outer surfaces the ribbons go forward to the spinning wheel for manufacture into the completed strings, which are then dried, polished and tested for accuracy of size by means of a British Imperial wire gauge and again sterilised at a high temperature. Thus finished, the catgut answers the tests for sterility required by the regula-

tions under the Therapeutic Substances Act; it is enclosed in glass tubes containing antiseptic fluid, the tubes being sealed by means of a blowpipe flame. Merson's catgut is supplied variously hardened to give every duration period which is required in surgical practice, the longer period of resistance being obtained by means of a tanning process. No small portion of the success of this business is due to the pharmaceutical training of its founder, and Mr. Merson informed our representative that his experience as a pharmaceutical chemist is drawn upon almost every day to solve problems and to devise methods to improve and advance this important auxiliary to surgical work.

THE next three firms to be visited were in fairly close proximity to each other. The first call was to the offices of

Pinkerton, Gibson & Co., Ltd.

This company originated early in the seventies, when Richard Clark (who afterwards became principal of Raimes, Clark & Co.) entered into partnership with William Pinkerton (who was a traveller to Sang & Barker of Barony Street) and so founded the firm of Clark & Pinkerton, carrying on business as wholesale druggists at the top of Leith Walk. In 1888 Mr. Pinkerton was joined by Mr. Adam Gibson, F.C.S., who continued the business with marked success after his partner's death. Mr. Gibson was a prominent Scottish pharmacist, almost as well known south of the Tweed as he was in the north. He contributed several papers to the North British Branch, the more notable being on solutions of hypophosphites and extract of calabar bean. He was appointed a member of the Board of Examiners for Scotland in 1882, and served in that capacity for many years, also as a member of the Scottish Executive. In 1919 a limited liability company was formed, the directors being Mr. F. S. Bauchop, Mr. W. Ellis and Mr. A. Nicolson; on the retirement of Mr. Bauchop, Mr. T. A. Smith joined the board. The company is well known to Scottish chemists for galenicals, chemists' packed lines, sundries and proprietaries. Messrs. Pinkerton, Gibson & Co., Ltd., claim to be the pioneers of motor delivery and to-day maintain a good service to all parts of central Scotland. Their premises in Thistle Street Lane occupy four floors and a spacious basement; the top floor is devoted to the large range of "patents" required in modern business; the "dry" room is situated on the second floor and the "wet" room on the first. The ground level is used for despatch and the laboratories occupy the basement. In addition there is a separate department for packed drugs and specialities in which the company has made good progress in recent years, and is continually adding new and attractive lines to an already comprehensive list; the excellent reputation for medicinal syrups and galenicals is, of course, constantly maintained.

SOME short distance down Broughton Street was found the retail and wholesale business of

John T. Coats & Co.,

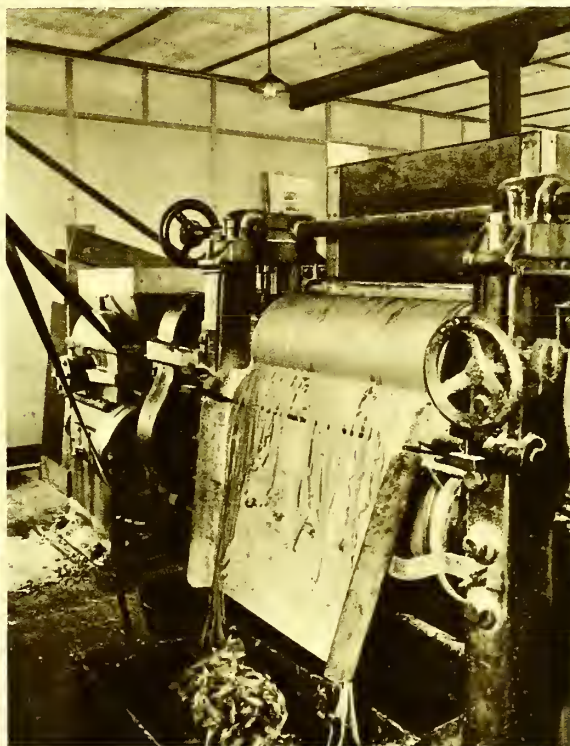
which is well known to Scottish chemists. It was established in 1867 and was taken over by the present proprietor in 1884. The business, while still retaining its position as one of the leading Edinburgh retail pharmacies, has developed an extensive wholesale side, which includes the manufacture of medicinal preparations, galenicals and a range of chemicals. The exigencies of modern business demanding a more spontaneous service, the company tabulated and examined many forms of despatch, and then undertook the necessary reorganisation. The laboratory was transferred to larger premises and the agency department was placed in the old laboratory quarters. The photographic laboratory was installed some ten years ago primarily for D. and P. work. Since then, however, it has grown steadily, and its activities now include nearly every branch of photographic work. The idea of service is responsible also for the "Freshly



PHARMACEUTICAL FACTORIES OF SCOTLAND A Page of Glasgow Views

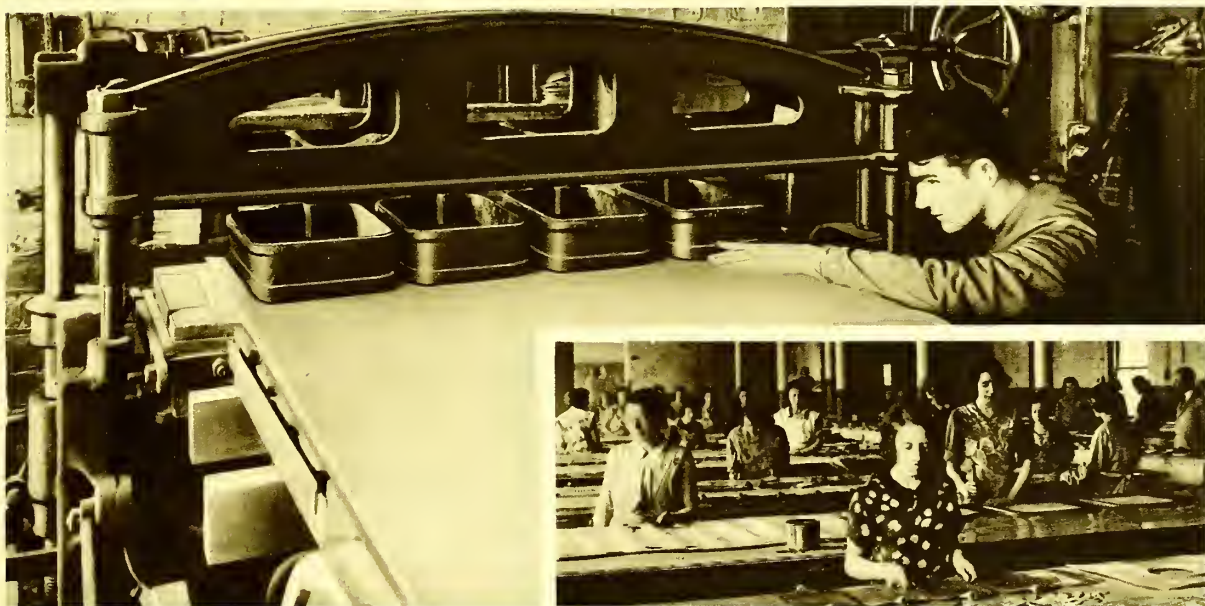


Filling and packing Cromessol (The Cromessol Co.)



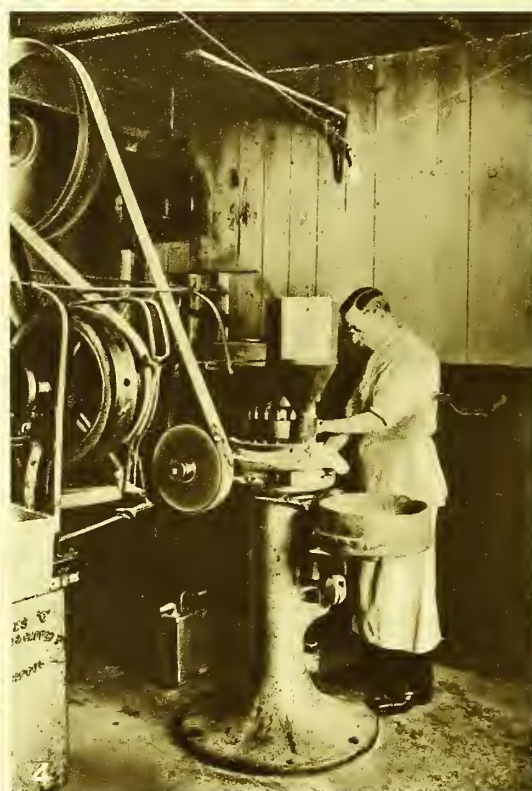
Left, Filling and packing department
(Cockburn & Co., Ltd.)

Above, A stage in soap manufacture
(Thomas Reid & Sons, Ltd.)



Manufacturing hot water bottles (Campbell, Achnach and Co., Ltd.) Right, Assembling

Above, Die-stamping bottle shapes



EDINBURGH

Duncan, Flockhart & Co.

- 1, Steam Pan Room
- 2, Milling and Filling Room
- 3, Corner in Analytical Laboratory
- 4, Rotary Tablet Machine
- 5, Capsule Filling
- 6, In the Poisons Laboratory

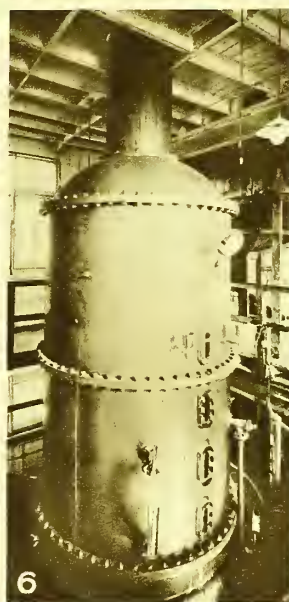
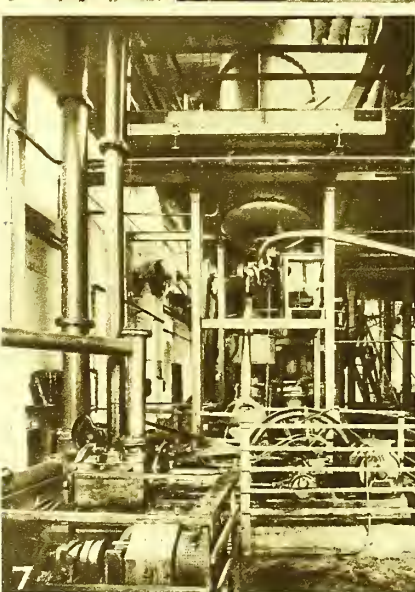


FACTORIES

J. F. Macfarlan and Co.

- 1, Ether Filling
- 2, Analytical Laboratory
- 3, Chrysarobin Extractor
- 4, Drying Cupboard with Salicin
- 5, Boric Lint Machine
- 6, Codeine Autoclaves and Washers





HARKNESS, BEAUMONT & CO., LTD., LEITH

1, Part of laboratory 2, Malt factory, Junction Bridge 3 and 5, Views in warehouse 4, Malt packing department 6, Malt vacuum extractor 7, Machinery in malt factory 8, Speciality packing room



Edinburgh Houses—cont.

Prepared " scheme. Briefly, the scheme provides for the preparation on demand of those products which, by reason of their nature or chemical composition, deteriorate or alter with some degree of rapidity. The wide range includes distilled water (for which a new automatic still was recently introduced), medicated waters, tincture and infusion of digitalis, cataplasma kaolin, various syrups and photographic developers. During the past few years the company has developed the manufacture of fine chemicals, the most important being salts of caffeine, calcium, mercury, lead and zinc; other products include terpin hydrate, and ammonium and lithium benzoates. Mr. John T. Coats is a pharmaceutical chemist, a member of the Society of Chemical Industry, a member of the Edinburgh Merchant Company, a member of the Edinburgh Chamber of Commerce, and one of the oldest pharmacists in business in Edinburgh. His son, Mr. H. W. Coats, is an associate of the Heriot-Watt College, an associate of the Institute of Chemistry, and takes charge of the laboratory side of the business.

At Broughton Market our representative visited the old-established printing business of

Andrew Kinross

The late Mr. Andrew Kinross, who died in 1919, aged eighty-seven, was probably the oldest lithographic printer and the last of the old school of master-lithographers in Edinburgh. In 1885, together with the late Mr. George Black, he established the firm of Kinross & Black in Hanover Street, Edinburgh; this partnership was dissolved in 1899, Mr. Kinross carrying on under his own name. In 1914 he took into partnership Mr. T. W. Jack, who had been associated with him for twenty years; Mr. Jack is the present sole proprietor. From Hanover Street a move was made to Elder Street and later to St. James Place, where the works remained for twenty-five years. The present building at Broughton Market is equipped to maintain the high quality of label printing and folding-box manufacture for which the firm has been known for nearly half a century.

On the way to Leith our representative called upon

Raimes, Clark & Co., Ltd.,

Smith's Place, Leith Walk, who have the distinction of being the oldest wholesale druggists' business in Edinburgh; it was founded in 1816 by Richard Raimes, a Yorkshireman by birth, who later took into partnership Mr. George Blanshard. Richard Raimes was apprenticed to Bowling, Walker & Co., of London, and as soon as he had served his time he joined his brother, John Raimes, to work a commission business from York. As a commercial traveller Richard Raimes travelled the length and breadth of the country, riding with saddle bags and top boots from London to John O'Groats by the east coast and returning by the west, transacting business during the journey. In 1818 he and his brother opened an office in Parliament Square, Edinburgh, and afterwards removed to Greenside, where they added the wholesale drug business. Moves were made as business increased successively to Union Place, Wyfe Place and Smith's Place, all in Leith Walk, and it is at the last-named spot that the present premises of Raimes, Clark & Co., Ltd., are now situated. Mr. Raimes became a member of the Council of the North British Branch in 1857 and was president during 1859-60. Mr. George Blanshard also took a very active interest in the Society, and became a member of the Council of the Branch. Mr. Richard Raimes was succeeded in the business by his son, Mr. Richard Raimes, jun., who was joined by Mr. Richard Clark when the firm of Clark & Pinkerton was dissolved, the business becoming known as Raimes, Clark & Co.; Mr. Clark continued after the death of Mr. Raimes until he also died in 1907. He was an interesting personality, taking a very active part in municipal affairs; he was first president of the Edinburgh Town Council and senior

bailie and was a candidate for the Lord Provostship, but died before achieving this honour. He was twice married, his second wife being Mrs. Richard Raimes, the widow of his former partner. On the death of Mr. Richard Raimes, jun., Mr. Clark became sole partner, but later had associated with him Mr. Davies, who had been with the firm for a lifetime, and Mr. William Duff; Dr. George Coull was then scientific adviser. Everyone, of course, knows the genial Dr. Coull, who, in his present capacity of managing director, runs the affairs of the company with great success. Dr. Coull is a native of Edinburgh; he served his apprenticeship with Baildon & Son, 73 Princes Street, passed the Minor in 1883 and the Major in 1886, serving for two years (in the interval) with Clark & Pinkerton. Matriculation at Edinburgh University followed and, in 1889, he obtained the degree of B.Sc. in Pure Science; in 1899 he graduated as Doctor of Science. After taking the B.Sc. degree, Dr. Coull entered the service of Raimes, Clark & Co. as chemist and laboratory manager, and became managing director of the business on the death of Mr. W. A. Davies in 1910. He takes an active interest in municipal affairs, and in 1918 was elected a bailie. Dr. Coull is at present a member of the Executive of the North British Branch, a governor of Heriot-Watt College, a member of the Leith Chamber of Commerce, and a member of the Council of the P.A.T.A. A tour of the works at Smith's Place took our representative first to the mill room, where he saw two large edge-runner mills in operation; then to the capsule department, where girls were busy making and filling a large variety of capsules by hand. In the pan room he noticed a batch of liquid extract of cascara in course of preparation; this department is equipped also with stills and emulsifiers. The analytical laboratory contains a range of the latest apparatus, such delicate instruments as balances being kept in a special room; there is also a well-stocked library of technical books, and, it was noticed, a set of bound volumes of *THE CHEMIST AND DRUGGIST*, "*The Pharmaceutical Journal*," and the "*Year Book of Pharmacy*." A special portion of the works is devoted to the manufacture of potassium iodide, Messrs. Raimes, Clark & Co., Ltd. being one of the group of makers in this country of this valuable salt.

ALTHOUGH for reasons of space a separate heading for Leith has been omitted, that district contributes a share of pharmaceutical products; while in Leith our representative visited the premises of

Harkness, Beaumont & Co., Ltd.,

Junction Bridge, which is an interesting business established many years ago for the purpose of supplying chemicals, drugs, pharmaceutical and other preparations. The extensive works are conveniently situated along the riverside, and considerable internal alterations and improvements have been made, rendering the premises well adapted to the requirements of a modern wholesale drug house. The company manufactures pharmaceutical products on an extensive scale and maintains a large plant to cope with the increasing demand for malt extract and other malt preparations. It was, of course, a pioneer in the malt industry and manufactures on the most up-to-date scientific lines. The company has cultivated also a reputation for the quality and finish of its goods, and to-day it occupies a position of very high standing in the trade. A large staff is engaged in packing counter lines in general demand and the company's own specialities. The printing of addresses on labels is done on the premises and a show-card printing department has been established for some time. For many years Messrs. Harkness, Beaumont & Co., Ltd., have enjoyed a high reputation for malt extract, and the manufacture of this useful article is seen to perfection at Junction Bridge. Large stores of malted barley are always on hand and in process of preparation; the company attributes much of its success to the fact that Scottish barley only, of the finest quality, is invariably used. The plant is of a modern



Edinburgh Houses—cont.

type, and long experience results in the production of an extract uniform in colour, consistency and flavour. The evaporation process in the huge steam-jacketed pans is under constant supervision in order that the correct temperature and pressure may be maintained. The same care is applied to the manufacture of other malt preparations, such as malt and cod-liver oil, liquid malt, Lactomaltine, Strenthol vitamin malt, Sunray malt and oil, irradiated vitamin malt, Kem-Malt (malt with Parrish's food) and Kem-Malt and oil. Cod-liver oil emulsion, another popular line, is made in special emulsifiers and is an excellent emulsion of fine flavour and good keeping qualities. The company is a large purchaser of cascara bark, and is able to guarantee full maturity before manufacture. By buying well ahead of requirements and by careful storing a constant supply of well-matured bark is maintained, a point of great importance in the making of a good extract. The company's special cascara is known to and appreciated by the trade, and its B.P. extract is noted for high extractive value and uniform efficiency. In this department also the evaporating plant is up to date and capable of a large output. In conclusion, it may be mentioned that our representative received a cordial welcome at the works, a welcome such as will be extended to any customer who desires to visit the premises.

LEITH is represented also by

Stewart, Goodall & Dunlop, Ltd.,

2 James Place, who are the proprietors of Nuctone, a hair dye which is finding increasing popularity. Nuctone is the result of experiments to evolve a safe and effective preparation. Although Nuctone, by its nature, suggests itself as a hairdressers' line, it appears that the sales through chemists amount to about 50 per cent. of the output.

Perth & Dundee Works

THE city of Perth may be termed, perhaps, the gateway to the north. Arriving after a pleasant journey from Edinburgh, our representative lost no time in seeking the premises of

Thomas Harley,

who is well known to the trade as the energetic proprietor of Rodine rat and mouse exterminator. Mr. Harley, after thirty-eight years of local retail pharmacy, retired from his shop four years ago, to devote himself to the manufacture and sale of his proprietary. His career is an outstanding example of success acquired by industry and close attention to business. Born at Grahamstown (South Africa), he came to Scotland in his early years, and after an apprenticeship to the late Mr. Charles Kerr, Dundee, he gained further experience at Glasgow and Southport before qualifying at Edinburgh in 1888. Two years later he bought the business of the late Mr. James Gowans, High Street, Perth. Mr. Harley has held many public offices and is at present vice-president of the local Insurance Committee, a trustee of Perth Savings Bank, president of the Rotary Club, and Moderator of the Perth High Constables. The Rodine business is founded on goodwill which has been acquired by virtue of the merits of the product throughout the thirty odd years of its existence. Mr. Harley commenced by preparing and selling Rodine in the pharmacy, but soon found that manufacture in larger quantities would be necessary. A small wholesale business was therefore established in connection with the shop, but it soon became evident that a more extensive factory was required. This was erected near to the shop at 29 High Street, and, at the time, it appeared to be thoroughly

up to date and sufficiently commodious for all future requirements. The demand for Rodine, however, increased with such rapidity that still larger premises became necessary, and the new works, situated between Methven Street and New Row, were opened on September 17, 1928, by Lord Provost Dempster. Our representative had little difficulty in finding the factory, which has become the centre of a new industry in the city. The building consists of four extensive floors, planned and equipped to provide abundance of room, ample air-space and light. All the machinery is electrically driven, each unit having its own separate motor. Access to the ground floor is obtained from a large yard having an entry in New Row. On this floor raw materials are received and stored. The tin-making plant turns out tins at the rate of 1,000 per hour, each tin being shaped from the flat material, beaded, trimmed and made ready for use; the empty tins are then carried by means of an electric hoist to the second floor, where Rodine is manufactured. The manufacturing and filling departments are specially ventilated to ensure freedom from nauseous fumes. The tins are spatula filled by girls (our representative was informed that machinery will be installed shortly for filling and lidding at a rate of about 100 a minute; the plant, of course, has had to be designed specially to suit the nature of the material) and placed on a travelling belt; in the course of the journey the lids are put on, the tins counted and boxed for conveyance to the despatch room on the first floor, where they are packed. Not the least of the success of Rodine is due to the activities of the extensive printing department. Here modern machinery produces colour work of a very high quality. Over a million circulars, it was stated, are supplied annually to customers.

A VERY interesting morning was spent at Dundee, where, under the able guidance of Mr. W. K. Petrie, chemist and druggist, our representative was able to visit the premises of

Johnston & Adams,

20 Murraygate; this business was founded by John Jolly in 1777 when he commenced in Castle Street. He was succeeded by William Jobson, who moved to the present premises in Murraygate, near to where the Dog Well stood until 1868, when it was demolished. The present firm, Johnston & Adams, continues the business there, but the recent growth of the manufacturing side has necessitated the acquisition of extensive additional premises and the separation of departments. The manufacture of polish is now carried on under the name of Jobsons, Ltd., in this way reviving the original name familiar to Dundonians for over a century and a half. The present proprietor of the business, Mr. W. K. Petrie, chemist and druggist, gave our representative some interesting information on the growth of the manufacturing side. Slipperine dance floor polish, Mr. Petrie explained, was the first line to be placed on the market, but was soon followed by Jobson's floor polish and Jobson's furniture cream, these products being made at Murraygate. About four years ago, however, the polish was renamed Lavapine (a particularly happy name) and the company Jobson Manufacturing Co. The demand became so great that an adjoining building was acquired as temporary manufacturing premises, and early this year a limited liability company was formed. Jobsons, Ltd., have now acquired factory premises in South Ward Road, a former jute mill, which, during the time of our representative's visit, was being rapidly converted into a modern polish factory. Just inside the entrance there will be a model window display of the company's products and the office decorations will be carried out in lavender and green. Besides the lines already mentioned, Jobsons, Ltd., manufacture Karvac polish for motor cars, Jobolac heat-proof black, Solvac cooker cleaner, Zip stain, grease and tar remover, Shuvac shoe cream and Woodshine varnish stains. The export side is being developed, and there are definite inquiries for these products already in Canada, South Africa, and other parts of the Empire.



Aberdeen Wholesalers

THIS issue contains such comprehensive information on the subject of the Conference City that little need be written here. The wholesale pharmaceutical needs of Aberdeen and surrounding districts are ably served by old-established firms; the first business to be visited was that of

William Davidson, Ltd.,

which is one of the centres of wholesale pharmacy in the north. The business was established in 1866, the founders being William Davidson and James Sim; at its formation it was known as Davidson & Sim, and the premises were in Castle Street. Previous to starting in Castle Street, Mr. Davidson for some years carried on a retail business at Fetterangus, in Aberdeenshire, while Mr. Sim occupied a post in London. When the firm attained its majority in 1887 Mr. Sim withdrew from the wholesale trade and opened the Aberdeen Pharmacy in Bridge Street. Mr. Davidson then carried on the business on his own account until his death, which occurred about ten years later. Mr. A. C. Bonner, who had been associated with his principal in the management of the business, then took it over, and a few years later a commodious warehouse was built in Palmerston Road, and the business was transferred to it in 1901. In 1925 a serious fire broke out which completely destroyed the stock and buildings, causing damage to the extent of forty thousand pounds. The present modern premises, built on the scene of the disastrous fire, are spacious and well adapted to carry the large stock necessary. Our representative noticed, on the first floor, a comprehensive patent stock room; on the second floor, a drug room, where all drugs are put up; on the third floor, bulk stocks; and still higher, wools, lints and dressings. There is also a special department where simple medicaments such as certain tinctures, syrups, etc., are prepared. On the opposite side of the road the company maintains a large store for bottles, empties and oils—a recent development in consequence of the increasing demands for accommodation for stock in the main building. The directors are Mr. J. H. Edwards, M.A., LL.B., advocate, Aberdeen (appointed in June 1911); Mr. Robert Will and Mr. Peter M. Craighead, who was appointed managing director following the death of Mr. Bonner in 1928.

William Paterson & Sons (Aberdeen), Ltd.,

is the oldest wholesale house in Aberdeen, having been established in 1838 by William Paterson, who took premises in Broad Street and later moved to the Gallowgate. He was succeeded in turn by three sons, Henry, James and Stephen, and it was during the managership of Stephen Paterson that the firm moved to its present situation in Spring Garden. In 1891, Mr. David Ross, chemist and druggist, entered the firm and eventually became senior partner. Under his guiding influence the firm advanced rapidly, extending, in particular, the manufacturing side and increasing the patent and sundries department. The present managing director, Mr. Mitchell C. Ross, B.Sc., Ph.C., is the son of the late David Ross. In 1928 a limited company was formed, the directors being, in addition to Mr. Ross, Mr. W. G. Brown and Mr. J. Forsyth. The visit of our representative to the firm showed the advances which have been made. On the top floor is situated the wet room and the manufacturing laboratory, with its drying chambers and pan room. The manufacture of cream emulsion of cod-liver oil in electric emulsifiers was watched with interest; the manufacture of tinctures, ointments and syrups was also in progress. In particular some very fine fluid extract of cascara was observed; this is made by a special process from well-matured bark. The patent room was interesting on account of the comprehensiveness and size of the stock. In the speciality and

packing room up-to-date methods were being used in the production of a pharmaceutical series, beautifully labelled and issued with printed show cards, done on a Maseley machine. A Gammeter machine is used for printing chemists' names on labels. A well-known speciality of the firm is Victor's Essence of Rennet, which it has manufactured for nearly half a century. In the despatch department the town and country orders are treated separately, while the urgent post, bus and passenger train orders are in a section by themselves. Other features of the works are the oil and ether cellars, and the special room for packing waterglass. The analytical laboratory is well equipped with up-to-date apparatus.

Glasgow Industries

ALTHOUGH Glasgow and district comprises one of the largest and busiest industrial areas in the country there is very little manufacturing pharmacy carried on. On the other hand, Glasgow contributes a large number of what may be termed "the accessories of pharmacy." By that is meant such useful products as infant foods, soaps, weighing machines, disinfectants, toilet preparations, and so on. There is also a fair number of wholesale houses serving a large area of Scotland. In the following paragraphs will be found particulars of the firms which in Glasgow and district are of most interest to the drug trade.

Cockburn & Co., Ltd.,

Glasgow, was founded by the late Mr. C. T. Cockburn as a retail business in 1878, when he opened a modest pharmacy in Rutherglen Road. In a few years Mr. Cockburn had purchased another business this time in the centre of the city. He sold the original shop, but repurchased it for sentimental reasons after thirty years. The wholesale warehouse in Howard Street was started in 1895 in a building which was formerly a church. Messrs. Cockburn have also a small factory at Dennistoun where they manufacture many of their requirements including galenicals, pills, tablets, capsules and the well-known proprietaries, Cockburn's Pills and Little Victor Inhaler. The company has always placed considerable stress on the possession of the pharmaceutical qualification. Mr. C. T. Cockburn qualified in 1884 and, at present, three of the four directors are registered men. The directors are as follows:—Mr. W. W. Mollison, Mr. R. A. Couper, Mr. George Orr (in charge of the laboratory) and Mr. W. T. Kelly (director and secretary). Guided by Mr. Mollison our representative took the opportunity, recently, of walking round the Howard Street warehouse. In the packing room were noticed some very attractive packs in chemists' lines and upstairs some good showcards were being produced on a Maseley apparatus. An efficient system of despatch is employed, each order going into a separate bay; confusion is thus avoided and accuracy assured. The company uses a practical scheme designed to save space in lorries; orders are packed in standard cases of which there are two sizes. The second floor is devoted to the "wet" and "dry" departments and the D.D.A. room, while the third floor is used for bottle storage, etc. A large and varied stock is carried and particular mention should be made of the company's activities as manufacturers of first-aid dressings and cabinets.

Autoway Company

Great advances have been made within recent years in the design and construction of personal weighing machines. The old types, which were frequently ugly and cumbersome, have been replaced by models both accurate and elegant in appearance. Every modern chemist, if not already in possession of one of these new machines, would profit from a perusal of the range



Glasgow Industries—cont.

offered by the Autoway Company, 13 Wellington Street, Glasgow. Of particular interest to chemists, perhaps, is the Dual model which is a combined weight-recording and height-measuring machine of robust construction. The revolving weight dial, illuminated when the coin is inserted, is viewed through a clarifying lens and the measuring stick is telescopic, being hidden from view when not in use; the machine is finished in vitreous mahogany. Other models of interest are the Autoway "A," and model "C," which is designed for outdoor use. The company has a modern factory where only personal weighing machines are made. Branch offices and agencies are maintained at Manchester, Liverpool, Sheffield, Newcastle, Nottingham, Cardiff, Belfast and Dublin, while the London address is 51 Farringdon Road, E.C.1.

The Gem Automatic Weighing Machine Co., Ltd.,

48 New City Road, Glasgow, C.4, are the makers of the Gem personal weighing machine, which was designed by Mr. G. Matti (chairman of the company) about four years ago. The machine is fully patented and is considered by the makers to be a sound engineering job; the Gem is sensitive and weighs accurately from one pound to twenty stones and may be used, therefore, for weighing children. Although sensitive of mechanism it is of strong construction in the levers and, if exposed outside the pharmacy, will stand any amount of "horse play"; the machine is designed also to remain unaffected by weather conditions. The movement is made of hard brass and phosphor bronze and the bright parts are chromium plated; the finish is cellulose in three standard colours—mahogany, light blue and royal blue. In addition to British trade a considerable export business has been developed and the Gem is now in use in many parts of the world.

Askit, Ltd.,

558-564 Keppochhill Road, Glasgow, is a good example of the rise of a post-war business. From 1914 to 1919 Askit powders were sold in a quiet way through the retail shops of the founder, Mr. Adam Laidlaw, a well-known Glasgow chemist who died in 1925. During 1919 Mr. Laidlaw, with the co-operation of Mr. John Low (the present managing director of the company), formed the Askit Manufacturing Co., which enjoyed considerable success until 1925, when Mr. Low formed the present private limited company which purchased the whole of the rights in the preparation from Mr. Laidlaw. Mr. John M. Low is ably assisted in the conduct of Askit affairs by his brother, Mr. James Low. A new manufactory and laboratory is at present under construction in the Possil Park district of Glasgow, and every hygienic device is being incorporated in this building.

Thomas Reid & Sons, Ltd.,

Kinning Park, Glasgow, S.1, are the manufacturers and proprietors of the Pine Tar products range of toilet and shaving soaps. The company was founded in 1868, although the origin of the business can be traced back to 1816. As a soapmaking concern the title has undergone change, but the management has remained the same. In 1816 a Mr. William Henderson commenced business as a soap manufacturer; in 1848 the title was altered to William Henderson & Sons, and again, in 1880, to David Dreghorn. Mr. Thomas Reid, whose business was established in 1868, took over, in 1903, the Dreghorn concern, and in 1914 it became a limited liability company under the present title. Messrs. Thomas Reid & Sons, Ltd., are best known, perhaps, for pine tar products, the sale of which is confined to registered chemists; the series includes toilet soaps, shaving soaps, shampoos and other toilet preparations. During a visit to the works our representa-

tive was able to observe the various processes in the manufacture of soap and to note the many varieties supplied. The company's soaps, as the name Pine Tar denotes, are very dark in colour but, of course, they have a pure white lather and are smooth and effective in hard water.

Lorimer & Moyes, Ltd.,

7 Montrose Street, Glasgow, C.1, is an old-established business, having been founded in 1851 by the late Messrs. Lorimer and Moyes, in the neighbourhood of St. Enoch Square, Glasgow. A number of years later the business was removed to premises at Howard Street, and still later, about 1898, to Argyle Street; the present building was occupied during 1921. It is interesting to note that in each case the removals were to larger premises necessitated by the steady expansion of the business. Messrs. Lorimer & Moyes, Ltd., supply chemists' sundries, and the firm is one of the oldest, if not the oldest, of its kind in Scotland. Its activities extend throughout all Scotland, the North of England and Northern Ireland; branch premises are situated at 11 Waterloo Place, Edinburgh.

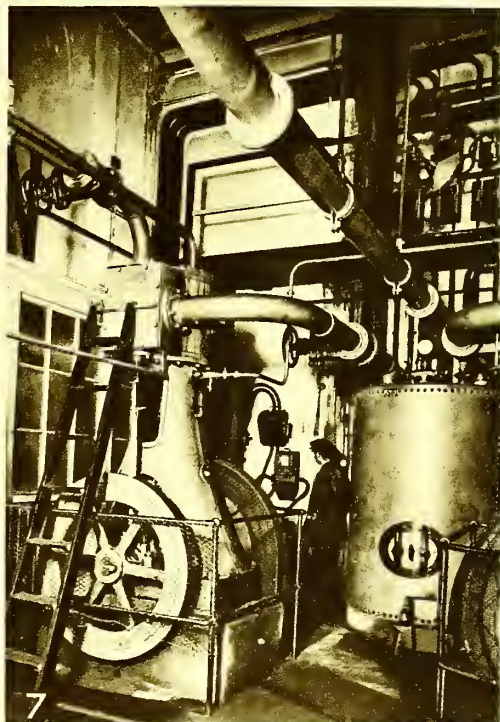
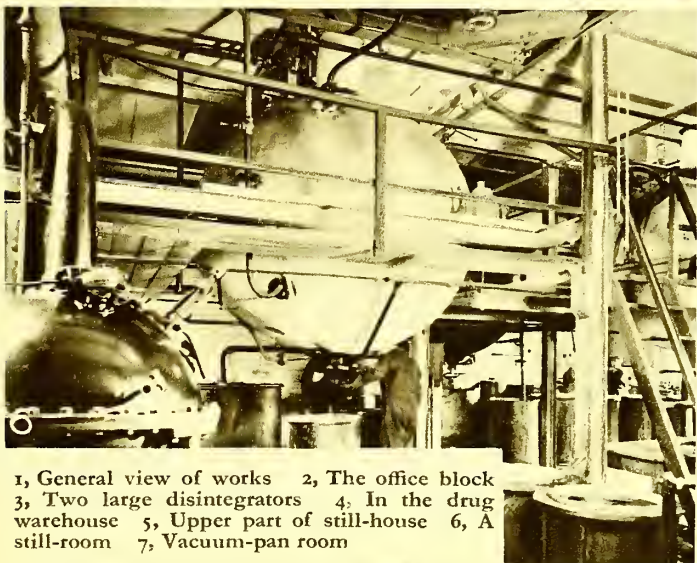
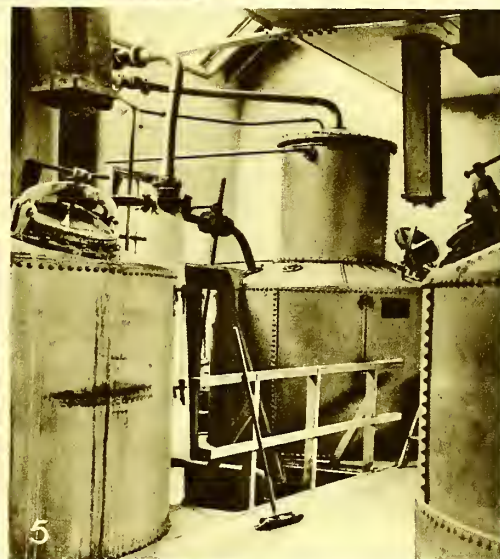
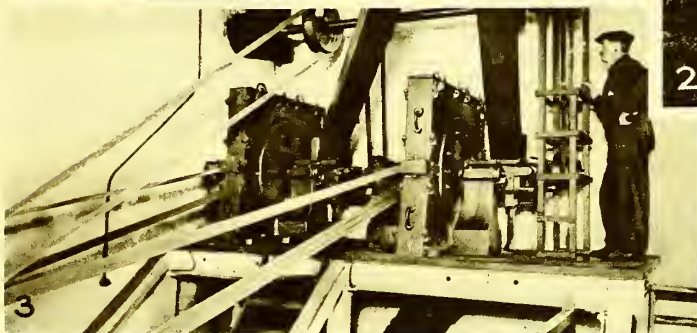
John C. Steele & Co., Ltd.,

54-56 Tylefield Street, Glasgow, S.E., are manufacturers of B.P. chlorinated lime. The company's product, packed in cartons and wrapped in blue paper, is a familiar one to many chemists. The business was founded in 1872 by John C. Steele, of Glasgow, who conceived the idea of packing chlorinated lime in such a manner that it would reach the user in good condition; previously chlorinated lime was usually sold loosely in paper bags, a most unsatisfactory packing. Before filling, the packets are waxed to prevent the access of moisture to the contents. In 1922 a limited liability company was formed, with Mr. W. Lindsay Hatrick and Mr. Osbourne R. Hatrick, of W. & R. Hatrick & Co., Glasgow, as directors.

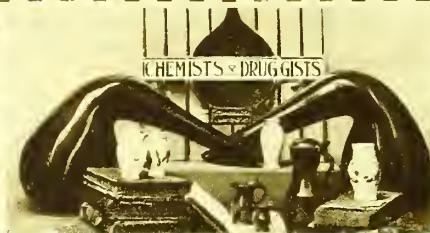
Sister Lauras Infant and Invalid Food Co., Ltd.

Sister Lauras baby food was originally the preparation of Sister Laura M. Smith, who throughout her professional nursing career was associated with a Scottish children's hospital. Her food was prepared primarily for the many weakly children coming under her care and for the purpose of finding a suitable diet for them. Sister Laura, of course, had no other intention but that her food should only be used in her hospital, but so great was its success, especially in cases of malnutrition, that a demand for it came from the medical and nursing professions. In response to this demand Sister Smith was granted permission by the hospital authorities to manufacture the food on a commercial scale, and a small company was formed to put it on the market. The development of the business has been rapid since it was established in 1912. From a very small beginning the company has become one of the leading manufacturers of infant and invalid foods. In addition to producing Sister Lauras baby food, the company also manufactures Sister Lauras invalid food, which is similar in composition to the baby food, but specially adapted to suit the requirements of adult invalids. Some years ago the company acquired the manufacturing rights of a laxative confection for children called Teddylax, which is made from fine quality chocolate to which has been added a very small quantity of a tasteless laxative. An important development in the company's affairs took place recently by the formation of a subsidiary company under the name of R. S. Watson (Products), Ltd., to manufacture Zomogen, a liquid food stated to contain hæmoglobin and bone marrow. Zomogen is a palatable preparation indicated in the treatment of anæmia, neurasthenia, general debility and in marasmic conditions of young children. Sister Lauras foods, Teddylax and Zomogen are manufactured under ideal conditions in an up-to-date factory in Bishopbriggs, near Glasgow.

T. & H. SMITH, LTD EDINBURGH



1, General view of works 2, The office block
3, Two large disintegrators 4, In the drug
warehouse 5, Upper part of still-house 6, A
still-room 7, Vacuum-pan room



Old retorts and jars. (Jobsons Ltd. Dundee)



Pan house, (William Paterson & Sons (Aberdeen), Ltd.) Right, A stage in the manufacture of potassium iodide (Raimes, Clark & Co., Ltd. Edinburgh)



Packing drugs and galenicals
(William Davidson Ltd., Aberdeen)



Making gelatin capsules
(Raimes, Clark & Co., Ltd.)



Left, Manufacturing Rodine (Thomas Harley, Perth) Right, Preparation of galenicals (Raimes, Clark & Co., Ltd.)



Glasgow Industries—cont.

The loco Rubber and Waterproofing Co., Ltd.,

Netherton Works, Anniesland, Glasgow, W.3, manufactures a wide variety of goods, including hot water bottles, air cushions, rubber sponges, rubber bath mats, waterproof piece goods and insulating materials. Hot water bottles are made in various patterns and with several outstanding features, notably the Schrader flush stopper which makes for easy filling, and the bakelite stopper which lends a neat appearance and finish and prevents dissipation of heat at the neck. An interesting innovation is a countersunk red bottle with a decorated body which closely resembles tweed fabric; the effect is unusual and pleasing. The Victor rubber sponge is of fine texture and smooth surface, a result achieved by selection of the best quality durable rubber and special manufacturing methods.

Montgomerie & Co., Ltd.,

Ibrox, Glasgow, are the manufacturers of Berina foods. Berina Food No. 1, according to analytical data supplied to our representative, has the following contents:—Moisture, 3.04 per cent.; fat, 17.30 per cent.; protein, 19.74 per cent.; carbohydrates, 55.95 per cent.; mineral matter, 3.97 per cent. The No. 2 food is malted, with a lower fat content, but is richer in proteins and carbohydrates, and is therefore suitable to follow the No. 1 food.

The Cromessol Co.,

140-148 Brand Street, Ibrox, Glasgow, S.W.1, was founded in 1924 as a separate business from the retail pharmacy owned by the proprietor, Mr. J. Crombie, Ph.C. Cromessol spraying preparations were supplied originally to cinemas, public bodies, sanitary inspectors and others, but it soon became evident that there was a distinct general demand for sprayers and essence. The result was the production of the complete household outfit now well known to chemists. For some years the company's business was conducted by a staff of four, but by 1929 this number had to be increased to nineteen; at present the employees number thirty-three, surely an excellent record for so young a company. Cromessol products have been exhibited for twelve successive years at Kelvin Hall, Glasgow, and, more recently, at other exhibitions throughout the country. From the solid material left over from the manufacture of their disinfectant perfumes Messrs. Cromessol prepare the Habuka sachet, a preparation which, it is stated, will kill moths besides acting as an excellent deodorant.

Constipon

is a laxative tablet, manufactured at 58 West Regent Street, Glasgow, which is steadily gaining in popularity. The business was registered in 1927 and the product was placed on the market in 1929. From the original premises, a small single shop, a move was made to accommodation at 65 West Regent Street, and, it is pleasing to record, a further move has become necessary owing to expansion of business, this time to a building approximately five times larger at the present address. Constipon is packed in three sizes.

Jackel et Cie. (of Paris) Ltd.,

73 Robertson Street, Glasgow, C.2, are the makers of Jackel's creams and other preparations. The founder, Mr. F. C. Jackel, was established as a perfumer and toilet expert in Paris before coming to Glasgow in 1883. He was, it is understood, the inventor of fixative creams for the hair, and was awarded three gold medals for his preparations at the Paris Exhibition. He conducted the business until it became too extensive, when, with British capital, it was formed into a limited liability company in 1908. Mr. Jackel died in 1925, aged eighty, and his widow and members of his family still reside in Glasgow.

W. E. Taylor & Co.,

27 Cadogan Street, Glasgow, are the sole proprietors of a number of preparations well known to many chemists. These are the Devet brand products, also Clobyn, Olivbyn and Petrobyn. The firm specialises in malt extract and combinations, compressed drugs, gelatin capsules, clinical thermometers and many other packed lines distinguished by their high quality and excellence of finish and packing. The company was founded in 1906.

W. & R. Hatrick & Co.,

158 Renfield Street, Glasgow, C.2, has been associated with Glasgow since 1860. Mr. William Hatrick started business in Paisley in 1830 and in 1860, with his son, he opened a wholesale house in Turner's Court, Glasgow. Their warehouse being required for the St. Enoch railway station, they afterwards removed to North Frederick Street. The building was gutted by fire and in 1881 they acquired premises in Renfield Street. The two sons of the original proprietor, Robert and James L. Hatrick, succeeded their father, but James went to London and started the firm of James L. Hatrick, surgical instrument makers and dealers, which is still carried on by his son. The present proprietors, Mr. W. Lindsay Hatrick and Mr. Osbourne R. Hatrick, are the sons of Mr. Robert Hatrick. In 1898 a disastrous fire occurred, when the Renfield Street premises were completely gutted. Temporary premises were secured, however, in Waterloo Street and the firm, although severely handicapped, managed to carry on and to rebuild in their old position. On walking round the premises the visitor is impressed by the spaciousness of the various departments. The offices are on the left of the main entrance and on the right is a large packing room. On the first floor is the "wets" department with good accommodation and a complete stock. The "dry" and proprietaries sections are well arranged and present a scene of considerable activity. The dry goods storage, where the larger stocks are kept, is in communication with the other departments by means of a hoist. On the top floor is the laboratory, where such products as tinctures, syrups, liquors, concentrated infusions, decoctions and liquid extracts are produced.

Robert Young & Co., Ltd.,

Cranstonhill Chemical Works, Elliot Street, Glasgow, C.3, was founded in 1894 by the present managing director, Mr. Robert Young. Offices were acquired at 106 Bothwell Street, and the works were situated in Hydepark Street. At this time the firm specialised in the manufacture of Septol disinfectant fluid, Sacarbolate liquid disinfectant soap and Microbene antiseptic fluid, products still well established in the market. In 1900 the works and offices were transferred to Elliot Street, where substantially increased premises were obtained and in 1911 the firm was registered as a private limited company, and a tar distillation works was opened at Milliken Park, Renfrewshire; since that date business has expanded considerably. From 1918 until the current year the production of Young's sheep dips and other horticultural and agricultural preparations, and Young's motor oils, soaps, greases and all grades of disinfectant fluids has necessitated extensive additions to the works and offices, and these have now been thoroughly modernised. The directors are Mr. Robert Young (managing director), Mr. Kenneth M. Young and Mr. John Logan; Mr. W. McLachlan is the secretary.

Campbell, Achnach & Co., Ltd.,

Thistle Rubber Mills, 59 Wallace Street, Glasgow, C.5, are of interest to chemists, chiefly on account of hot water bottles, of which the company is a large manufacturer. When our representative called at the mills he was shown some of the very interesting processes in the making of a hot water bottle, including die cutting, binder cutting, various stages in assembly, stamping of brand



Glasgow Industries—cont.

names, and finally vulcanising. One of the most interesting operations was the preparation of patent valves for Ronoleke bottles. In this bottle the rounded flange of the screw top engages with the rubber flange at the base of the funnel; this latter flange is of built-up rubber and acts as a washer. In the neck of the bottle, securely embedded in built-up rubber, is the socket, which has a wide metal flange, and which is kept in position by means of projecting lugs. The Ronoleke bottle is guaranteed never to leak at the neck unless wilfully damaged. Before leaving, our representative was given particulars of the improved Ronoleke velour-covered bottle, which, he was informed, is supplied in shades of red, blue and orange, with the new chain attachment.

Fairy Dyes, Ltd.

During the past ten years the manufacture of dyes for home use has increased to a very great extent. At 61 Trossachs Street, Glasgow, N.W., is situated the factory where Fairy dyes are manufactured under modern scientific conditions. These dyes, which have become a popular chemists' line, require considerable blending before they are suitable for home dyeing purposes. This will be readily understood when it is realised that a tube of Fairy dye will give equally successful results on either cotton, wool, silk or mixtures. The standardisation of such blending of dye is necessary, and the successful results obtained from the many millions of tubes sold annually is proof of this.

THE remaining businesses described in this article are situated respectively at Carluke, Paisley, Kilmarnock, Coldstream and Elgin, and complete what may be termed the pharmaceutical industry in Scotland.

Hinksman & Forrest, Ltd.,

17 High Street, Carluke, are the proprietors of Hinksman's Asthma Reliever, Hinksman's Asthma Cigarettes and Hinksman's Asthma Smoking Mixture. In 1880 Mr. John Hinksman left the service of John Mackay & Co., Ltd., of Edinburgh, and purchased a retail business in Carluke; a few years later he acquired another business in the village. At this time Mr. Hinksman had a customer who suffered from asthma and whose remedy was to burn stramonium. Mr. Hinksman, after some discussion, agreed to prepare the remedy, and, by experiment, he found what was considered to be the best combination of herbs; the result is the now well-known Hinksman's Asthma Reliever. The preparation was made first in a small back shop, dried on an iron tray in front of a good fire and powdered in a metal mortar. Often when a customer called the apprentice away a hot cinder would fall on to the tray, when there was an immediate conflagration necessitating prompt action. In 1888 property was purchased in High Street and both businesses combined there; ample accommodation was available for expansion on the manufacturing side and drying houses, grinding and sifting machinery and tin-filling machinery were installed. In these early days much of the business was conducted through the medium of the post. Mr. Forrest, who is manager and a director of the company, served his apprenticeship with Mr. Hinksman, remaining as an assistant until he qualified in 1895. After experience in Liverpool, London, Brighton and South Africa he returned to Scotland and joined his former employer. After the war (Mr. Forrest served from 1914 until 1919) a private limited company was formed, and in 1921 Mr. Hinksman died. Distribution through trade channels has taken the place of the postal business, and there are very few chemists north of the Tweed who do not stock Hinksman's Asthma Reliever.

The Western Chemical Co. (Paisley), Ltd.

Sandyford Works are situated between Paisley and Renfrew and are approached by passing through a

delightful garden, an unusual feature in this part of the country. The company's principal products are magnesia and ammonium carbonate, and it was with interest that our representative accepted an invitation to view the plant. The first department to be visited was the engineers' shop, where all repairs are carried out by a staff of competent engineers. In the magnesia sheds are stored huge quantities of a raw stone and inquiry elicited the information that the material was magnesite which is delivered in shiploads from Greece. The magnesite is passed first through a large revolving kiln resulting in the production of a variety of grades of magnesia. The magnesite, it was stated, weighs about 105 lbs. per cubic foot, but finishes at 7 lb. per cubic foot as carbonate. In a huge shed (which is, in fact, a converted hanger) light magnesia, not quite so pure as B.P., is manufactured. The plant in this shed includes revolving retorts, drying stoves and sifting machinery; all heat is supplied by gas. The impure gases from the burning magnesite are utilised in the works for various purposes, one of which is the manufacture of pure carbon dioxide which, when mixed with ammonia, forms ammonium carbonate.

Rankin & Borland,

7 King Street, Kilmarnock, was established in 1798 by Wm. Rankin. The original John Borland, who was an outstanding figure in the pharmaceutical world and a gentleman of considerable attainments, entered upon his apprenticeship in 1837, and was assumed a partner about 1866; he remained actively in business until his death in 1900. His son, John Borland, jun., was associated with his father in the business and thereafter, until his own death; and now a member of the third generation, also named John Borland, takes an active part in the management of the business. Associated with the retail business practically since its inception has been the aerated water department, begun in a small way in the cellars at 7 King Street, but now occupying large and commodious premises at East George Street, which department, under the supervision and management of Mr. Borland, has been entirely reorganised and refitted with the latest type of machinery for washing, syringing and filling bottles and syphons. Horse traction has been replaced by motors, which cover a large area. At East George Street also are situated the stills for distilled water and recovery of spirit, and here is manufactured liquid extract of cascara and liquid extract of senna pods; the latter was originally introduced by the firm in 1889. At East George Street also is manufactured and packed Rankin's Ointment, which has attained and holds place as one of the premier products for the particular purpose for which it is used.

Wilson's Original Sheep Dip

is manufactured by Mr. W. E. Howden, chemist and druggist, Coldstream. The business was founded in 1830 by the late Mr. George Wilson, who was succeeded by his son, who died in 1919. When the business was first established, Mr. Wilson prepared an arsenical sheep dip, considerable quantities of which are now sold in the North of England and South of Scotland. The preparation is probably one of the oldest sheep dips now on the market. Mr. Howden is also the proprietor of Rawdin's sheep dip, which until recently was made in Jedburgh. He conducts also a good-class family business with an extensive agricultural connection.

R. Thomson,

Elgin, is the manufacturer of the well-known Cod-Liver Oil Cream. This is an elegant and particularly palatable emulsion which well merits the esteem in which it is held by many members of the medical profession and numerous customers. The Cream is prepared by means of a Hunter emulsifier or a Premier mill.

Trade Notes

PANTHESINE BALM is the newest product of Sandoz Chemical Works, 5 Wigmore Street, London, W.1.

THE PREEMO Co., 63 High Holborn, London, W.C.1, are now offering a thinner model of the Plassard sifter powder box.

BRISTOW'S BEAUTY CREAMS (T. F. Bristow & Co., Ltd., Colindale, London, N.W.9) are packed in dainty boxes and sell at a popular price.

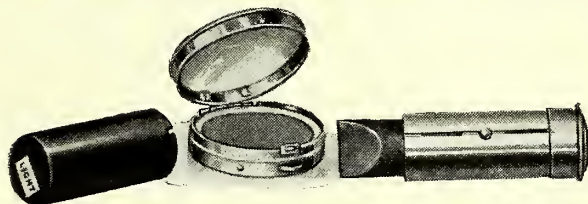
L. T. LAUDER, 4 Miles Hill Street, Leeds, calls attention elsewhere in this issue to a filling apparatus which is specially suitable for sprinkler neck bottles.

SANGERS, LTD., 258 Euston Road, London, N.W.1, have issued a new edition of their catalogue of proprieties, druggists' sundries and photographic materials.

CLOSED FOR STOCKTAKING.—Francis Newbery & Sons, Ltd., 27 Charterhouse Square, London, E.C.1, announce that their premises will be closed for stocktaking on June 29 and 30.

THE OLLWI personal weighing machine, an apparatus of modern design, is illustrated in this issue by Automatic Novelty & Development Agency, Ltd., 87 Regent Street, London, W.1.

HARRIET HUBBARD AYER, LTD., 130 Regent Street, London, W.1, writing to us regarding their latest introductions, shown in the illustration, state that the lip-stick is as indelible as it is possible for one to be without the drying effect which has usually accompanied preparations of this nature. The cosmetic itself is avail-



able in five shades, namely, pomegranate, light, medium, Ayerbrunette and dark; the case is obtainable with a gilt or chromium finish. The Orchid Eye Shadow, a product which is particularly enhancing to the blonde, is presented in a dainty style which is characteristic of the toilet requisites offered by this well-known manufacturer.

MIRABILE SUNBURN LOTION is the name of an attractively packed preparation which is about to be placed on the market by The Abietans Manufacturing Co., Ltd., Concordia Works, Managers Street, London, E.14.

HOWARDS' ASPIRIN.—Howards & Sons, Ltd., Ilford, ask us to draw the attention of chemists to the special offers being made in connection with their aspirin tablets, and to point out that the window show is part of the condition upon which the bonus is given.

THEW, PARTRIDGE & Co., LTD., Lustra Works, Soho Square, Liverpool, who are among the largest importers of shellacs and gums in the North of England (importing from India, Sumatra and various colonies, direct into Liverpool) are able to offer special advantages to wholesalers in the Midlands and the North.

J. W. PINDAR & Co., Endwell Road, Brockley, London, S.E.4, are placing on the market a new press for making face powder compacts. We understand that this machine has been tried out in the compact department of a well-known British manufacturer and used with standard dies. The compacts produced are stated to have been in every way satisfactory. The output of the press—worked by girl operatives—is about 300 compacts per hour.

Births

Notices for insertion in this column must be properly authenticated.

SMALL.—On June 9, Dorothy Rosa, wife of Thomas Bakewell Small, M.P.S., Fisherman's Walk Pharmacy, Bournemouth, of a son.

WRIGHT.—At Winn Road Nursing Home, Southampton, on June 16, the wife of J. Arthur Wright, chemist and druggist (formerly of Wolverhampton), of a son.

Deaths

BROADHEAD.—At Batley, on June 10, Mr. Richard Broadhead, chemist and druggist, 38 Commercial Street, aged seventy-six. Shortly after qualifying, Mr. Broadhead went to South Africa, travelling and holding a position in connection with diamond mines. He fought in the troubles with the Zulus, and after contracting malaria returned to England in 1891 and acquired the business at Batley. He served as secretary of the West Riding Chemists' Association and of the West Riding Pharmaceutical Committee, and was a former president of the Dewsbury and District Chemists' Association. He is survived by a son.

GOY.—At 17 Battersea Rise, London, S.W.11, on June 15, Emmeline, wife of Mr. William Henry Goy, M.P.S. Among those present at the funeral, which took place at Wandsworth Cemetery on June 18, were the president and several members of the South-West London Chemists' Association; and the numerous wreaths included one sent by the Association.

DICKSON.—At Enniskillen, on June 17, Mr. John Wilson Dickson, L.R.C.P.Edin., L.R.C.S.Edin, L.F.P.S. Glasg., L.P.S.I. Dr. Dickson passed the Licence examination of the Pharmaceutical Society of Ireland in 1884, and after qualifying in medicine practised at Lisnaskea and Pettigo.

MCWALTER.—In the General Hospital, Singapore, on May 20, Mr. George Hunter McWalter, chemist and druggist, director and manager of Maynard & Co., Ltd., wholesale and retail chemists. Mr. McWalter qualified in 1910, and went to Singapore in 1920.

WHITESIDE.—On June 11, Mr. Harry Whiteside, North of Ireland representative for the last fifteen years for Walford & Co., Ltd., manufacturing chemists, St. Oswald Street, Collyhurst Road, Manchester.

Personalities

RONALD L. DEMUTH, son of Mr. R. Demuth, manufacturer of toilet specialities, London, N.W.6, has passed the Natural Science tripos at Cambridge University.

DR. JAMES THOMPSON, F.I.C., public analyst for Reading and a member of the staff of Reading University, has been appointed public analyst for Berkshire in succession to the late Sir William Smith. Dr. Thompson, who received his early training in the laboratory of the late A. H. Allen, of Sheffield, qualified as a chemist and druggist in 1899, and subsequently took the Ph.D. degree at the University of Heidelberg. Before the war Dr. Thompson was senior assistant chemist to the Sudan Government at the Gordon College, and during the war was a captain in the Royal Engineers. He was responsible for research work in connection with protective measures against poison gas, and from 1917 until demobilisation took sole charge of the Army research on wood carbon for use in the box respirator. It was owing to his observations that the chemical mechanism of the box respirator was finally understood.

Telegrams:
"Atoleine,
Sedist,
London."



Telephone:
Bermondsey
1141

John Bell, Hills & Lucas Ltd.
Our COLLOIDAL SUNBURN LOTION
IS UNIQUE
Supplied with Chemist's Name and Address.
Send for Sample & Prices
Oxford Works, Tower Bridge Road, London, S.E.1

ANTIBACSYN



FOR COLDS, GONORRHOEA
All Microbic Infections and Septic Conditions
—also—

ANTIMALIGNYN

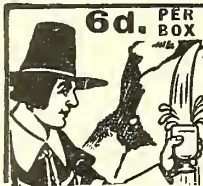
FOR INOPERABLE CANCER

Sufficient for 1 Month's Treatment.

£2 2 0

ANTIBODY PRODUCTS, LTD.
Bushey Grove Road, WATFORD.

Telephone: 4708 WATFORD.



6d. PER BOX

PURITAN SALTS

Trade
Mark
Rgd.

A new line advertised with "Nostroline"

ORDER THROUGH THE WHOLESALE

MATTHEWS LABORATORIES LTD., Clifton, Bristol.

THE 'FAIRCHILD' HIGH-CLASS DIGESTIVE FERMENTS

AND
PREDIGESTED FOODS

'PANOPEPTON,' 'ZYMINE' PEPTONISING
TUBES, 'PEPSENCIA,' PEPTOGENIC MILK
POWDER, etc.

Originated and Manufactured by

FAIRCHILD BROS & FOSTER (Inc. N.Y.)
New York, 65 Holborn Viaduct, London, E.C.1
Agents—BURROUGHS WELLCOME & CO.
London, Sydney, Cape Town.

"LESCOL" BRAND FLAVOURING ESSENCES AND (all) FOOD COLOURINGS (all)

OF THE HIGHEST QUALITY

6d. size (½ oz.) 4/- doz. P.A.T.A.

9d. size (1 oz.) 6/- doz. P.A.T.A.

1/- size (2 oz.) 10/- doz. P.A.T.A.

SPECIAL TERMS FOR DISPLAY

Order through your wholesaler or direct from

The London Essence Co., Ltd.
ESSENCE DISTILLERS SINCE 1896

GLENGALL ROAD, PECKHAM, LONDON, S.E.15

'Phone: New X 4110 (3 lines). 'Grams: "Vanillin, Kent, London."

Felsol

(Regd.)

for

Asthma

Continuous Propaganda conducted
with the Medical Profession.

P.A.T.A. terms upon request.

BRITISH FELSOL COMPANY, LTD.
15, CAROLINE STREET, LONDON, W.C.1

PATENTS & TRADE MARKS

THERE are many worrying difficulties to be overcome in connection with the Registration of Trade Marks and the grant of Letters Patent which members of the Retail and Wholesale Drug Trade can avoid by consulting efficient agents, who would undertake all the trouble for an inclusive fee and obtain protection in the United Kingdom and abroad. Advice in the first instance free. Pamphlets gratis.

REGINALD W. BARKER & CO.
56 Ludgate Hill, London, E.C.4.



QUALITY PRODUCTS

TABLETS & PILLS

Standard or Special Formulae, Packed or in Bulk

The NETTO—LYSOL

Cooper Laboratory
Watford

Telegrams: "Science, Watford."
Telephone: Watford 3612.

Transparit

THE TRANSPARENT WRAPPING MATERIAL

Insoluble, Odourless, Non-injurious.
Colourless and Coloured, in Sheets, Bags,
Envelopes and Discs. ASK FOR SAMPLE.

SIER, VOSS & TOMES, 11b Upper Thames St
'Phone: Central 9677. LONDON, E.C.4.



THE CHEMIST AND DRUGGIST

VOL. CXVI

JUNE 25, 1932

NO. 2733

A Varied Feast

CURRENT events, and especially the forthcoming meeting of the British Pharmaceutical Conference in Aberdeen, have influenced the choice of material for this Special Issue to an extent that has resulted in Scotland becoming, to use a phrase rendered proverbial by the late Lord Rosebery, the predominant partner. Alike in the text and in the photogravure illustrations, it will be found that a considerable proportion of the space available has been devoted to various phases of Scottish activity, past and present.

History of Pharmacy in Scotland

In going back to the origins of pharmacy north of the Border, we had the good fortune to enlist the co-operation of Dr. Thomas Ferguson, who, in a brilliant article, has traced the evolution of twentieth-century medical and pharmaceutical practice from the days of crude belief in magic. Dr. Ferguson's narrative, for all but the few who have the time to pursue the bibliographical clues given on his final page, is a sufficiently full account of a fascinating subject, and for its purpose is to be preferred to the longer but less ably marshalled histories of many students of the same literary materials. A word may be added on the three Gaelic manuscripts shown in our illustrations, the originals of which are in the National Library of Scotland. By the courtesy of Dr. H. W. Meikle, Keeper of Manuscripts in the Library, we have had access to the originals of these valuable witnesses to early Scottish practice. Of the two mentioned in the text, the smaller one on the left side consists of eighty-five parchment leaves, of small quarto size, bound in calf, and probably written, according to the catalogue of Donald Mackinnon, in the fifteenth century; four other copies are known, and one of these forms part of the larger MS. shown on the right side of the same page. It is a treatise on articles of materia arranged alphabetically. Turning to the larger manuscript, the commencement of a paragraph in Latin will be noticed; this has reference to a remark of Galen's on the relation between the brain and eyes. In the middle of the last line of the photograph the Latin comes to an end and the Gaelic begins. The third manuscript we selected, shown in photogravure, measures only $2\frac{1}{2}$ inches in length, and is in the original binding with parts of the straps for attachment to the girdle. It is partly a breviary, partly a treatise on medicine, and the "button" for fastening it consists of a Roman coin. In another part of the Issue will be found a descriptive account of the principal pharmaceutical industries in Scotland, in effect a conspectus

of the principal manufacturing houses in the drug and sundries trades. This section is the outcome of an extended visit, and the information given has been obtained, with a selection of pictures, at first hand. A separate article, with illustrations, is allotted to the manufacture of cod-liver oil in Aberdeen. The topic of cod-liver oil is rounded off with a second article on its extraction in Newfoundland; for its use we are indebted to the Acting High Commissioner, Mr. D. James Davies. At this point we must mention the cover of the Issue, the design of which, as usual, has been carried out in colour. Through the courtesy of Scott & Bowne, Ltd., several excellent photographs of cod-fishing operations were placed at our disposal, and from these our artists built up the result that is shown on the front; the back of the cover is a reproduction (also in photogravure) of an artistic copyright design executed for Dubarry Perfumery Co., Ltd. Articles on manufacturing houses are not confined to Scotland; there will be found, with photogravure illustrations, a new account of the fully equipped works, laboratories and offices of The British Drug Houses, Ltd.

The Conference City

Aberdeen is described and illustrated (again in photogravure) in an article less extended than the merits of that beautiful city would have justified, but sufficient, we think, for the purposes of Conference visitors who, in any case, will wish to pursue the subject in their guide-books. The scientific side of pharmacy finds exemplification in an account, by Professor Dr. Antun Vrgoc, of Zagreb, of the new Yugoslav Pharmacopœia, a subject of particular interest in view of the publication of the new edition of the British Pharmacopœia next September. With mention of "Perfumery in Etruscan and Roman Times," by Professor Guido Rovesti of Rome, we end our list of the principal articles in this Issue. Professor Rovesti has treated his theme from an Italian standpoint, and his research has brought to light facts of great interest. The colour plate depicts Hua T'Ō, a Chinese physician and surgeon of about the beginning of the third century of our era. In addition to the details given in the inscription of the plate, we read of him that he used neither scales nor measures—thereby establishing himself beyond doubt as of a tradition that has many representatives to-day. For this unusually magnificent example of colour work we are indebted to the courtesy of Dr. Wilhelm Clemm, technical director of Knoll, Ltd., London, E.C.3, a branch of the well-known chemical works Knoll A.-G., Ludwigshafen. Certain sections of our advertisement pages are, as on previous occasions, printed in two colours on tinted paper. To the mention that has already been made of photogravure we may add that the same agency has been brought into use in advertisements to the extent of forty pages in various colours, with results that speak for themselves.



An Account of A Visit to a Centre of British Manufacturing Pharmacy

TWENTY-ONE years have passed since we recorded, in some detail, our first impressions of a visit to the premises of The British Drug Houses, Ltd., at Graham Street, City Road, London, N.1. Two decades of steadily increasing business and a substantial widening of scope have necessitated very considerable expansion, and although Graham Street remains the western boundary, the site has been extended in all other directions; the eastern boundary has been removed to Wharf Road on the opposite side of the canal-basin, and both the northern and southern boundaries have also been altered by the acquisition of the adjoining premises. The situation is, of course, ideal for business purposes, the canal being a waterway for coal, goods and refuse, while Graham Street is within easy distance of the City. The heading of this article is an illustration of the B.D.H. works, produced by an artist from actual photographs; it gives an excellent idea of their size and position; it will be noted, also, that the premises are bisected by the canal-basin, valuable frontage being thus afforded. Communication between Graham Street and Wharf Road, as far as passengers and goods are concerned, is effected by means of an electric transporter which, incidentally, provides a minor thrill for many visitors. The following description is based on notes taken during a recent visit extending over several days.

THE OFFICES

THE importance of efficient office organisation to a concern like the B.D.H. is obvious. The magnitude of the business, its specialised nature and the urgency with which orders are required to be despatched are factors which were considered in planning the layout of this department and, indeed, of the whole premises. The sales offices occupy two floors, the whole of the ground level being devoted to pharmaceutical home sales, and the recently equipped first floor to the export and chemical departments. The layout of the offices is based on an even flow of work from the receipt of the order until the typed sheets are distributed to the warehouse. Inward mail is received at the post section on the ground floor, opened and timed; from this point orders are passed to the order clerks (who occupy desks nearby) where they are coded and scrutinised and then passed for distribution to the typists.

Typewritten copies of all orders are made and when they have been checked by a section of the staff detailed for this work, they are found to have progressed through half of the sales office and to have arrived opposite an imposing looking network of bronze-coloured pneumatic tubes. These tubes are the connecting links between the warehouse and manufacturing depart-

ments, and the office itself; and here we saw agile and experienced girl operators at the control station. Orders were passing out in little carriers of different colours and we were told that over 6,000 feet (about $1\frac{1}{2}$ miles) of tubing was used in this new installation.

In the accounts department we were greeted by a battery of electrically powered machines operated by girl clerks. Customers' accounts are kept on cards and the entries rapidly made upon these cards by the machines. Mechanised accounting is found to-day in most modern business concerns, and the B.D.H. have always kept a shrewd eye upon the advantages to be obtained from installing the most efficient devices in their offices.

A word as to the lighting: great care has been exercised in selecting the electric light fittings since efficient illumination is one of the essentials to maintaining a good output of clerical work. For each kind of work the right fitting has been selected; all are made of the same kind of glass which, we understand, is Holographane. The flooring in the new offices is Magbestic, a smooth composite material; the surface is curved where the floor joins the wall so that there is no lodgment for dust. The internal telephone system is manually operated and includes over 140 stations; the new type of instrument, the hand-microphone pattern, has been installed. An illustration on p. 733 shows the section of the home sales office containing the pneumatic tube distributing station. On the left, the bench occupied by the staff of invoicing typists runs the length of the home sales office.

ANALYTICAL LABORATORIES

IN the analytical laboratories is centralised a comprehensive system of control which starts with the raw materials required for all manufacturing operations, and does not cease until the finished product has been certified as being in conformity with the appropriate specification. It may at once be granted that it would be difficult to find a parallel to the varied nature of the work carried out both in analysis and research by the large scientific staff of this organisation, owing to the company's unique position as manufacturers of an immense number of products used in the fields of medicine, pharmacy, physiology, pathology, and pure and applied chemistry. Nevertheless, despite such diversity of activities, all are co-ordinated under one rigorous system of control, which it will be of interest to consider in brief outline.

Every substance received in the warehouses, whether raw material or finished product, is given a serial number, and a label such as that illustrated at the bottom of the opposite page, bearing the words "Not Passed" is



affixed to every container. Simultaneously, a notification bearing the same number is forwarded to the office of the chief analyst, where the necessary steps are taken for the proper sampling by one of the firm's expert samplers. With a minimum of delay a thorough examination of the chemical and physical characters of the material is made by members of the analytical staff, who, while possessing a wide general grasp of the department's work, are themselves specialists in their own particular branch. According to the decision of the chief analyst, based upon the reports sent in to him, the appropriate "Passed," "A.R.," "P.P.P.," or "Rejected" tickets are issued from his office. These tickets, bearing the signature of the chief analyst or his deputy, are affixed to the original label, and the approved materials are then—and only then—available for issue.

The groundwork of the analytical department's activities is, of course, the routine testing of the purity of all products according to established qualitative and quantitative methods. It is impossible to enumerate the variety of samples—medicinal and pharmaceutical products, alkaloids, fine organic and inorganic chemicals, analytical and micro-analytical reagents, vitamin and hormone products, to mention only a few—which are dealt with in the course of a day's work and which in the aggregate amount to very many thousands annually. In the course of these determinations the most modern scientific apparatus is utilised, and we are glad to record that this is of British manufacture wherever possible. Such instruments as refractometers, polarimeters, and viscometers are in continuous use, whilst as an example of the latest methods we may instance the application of the quartz spectrograph, not only to delicate spectroscopic analysis such as that of the rare earths, but also to the determination of vitamin and other biological products. In conjunction with the spectro-photometer (seen in one of our illustrations) this instrument is used to obtain the absorption spectra of materials, and from the extinction coefficients thus determined the potency is known. Another instrument which finds many applications is the B.D.H. pattern of the Lovibond tintometer. This was designed specially by the chief analyst to afford facilities for extremely rapid colour matching such as is required by the antimony trichloride colour test for chromogens (which, it will be remembered, was first published in 1926 as a research contribution from these laboratories).

Ingenious mounting enables the quartz mercury lamps to be used as a source of dark ultra-violet rays for fluorescence analysis, for fading tests in which the materials are exposed to the full radiation from the lamp, and also as an improved illuminant for polarimetric determination. Eloquent testimony to the thoroughness of the B.D.H. organisation is borne by the fact that much of the electrical apparatus in constant use, such as electrical furnaces, thermostatically controlled drying ovens and constant temperature baths, has been devised and in many cases constructed in the firm's workshops. The photograph on p. 736 (top left) shows the recent addition to the analytical laboratories.

WAREHOUSE AND STANDARD STOCK

THE excellent system of standard stock, which has been evolved by the B.D.H. to facilitate the rapid assembly of orders, provides a comprehensive stock of everyday lines ready for issue in standard packages and maintains it at a more or less constant level. During our visit we commenced our inspection of stock at the laboratory stores from which the filling departments are supplied. In the heavy "wets" department (oils, glycerin, ointments, syrups and similar lines) we observed, for example, the filling of chemical food and syrup of figs by means of two specially designed vacuum filling machines. Two rooms are devoted to the storage of castor and olive oils; in the room in which the latter is stored the temperature is constantly maintained at just above congealing point. The filling of liquid paraffin attracted our attention, and we were informed that the oil is filled by vacuum into an

overhead tank, from which it is taken to automatic fillers. In the case of glycerin, the fillers are steam-jacketed. Liquid preparations are put up in a room which is situated next to the laboratories and tincture room. Filled bottles are placed in trays together with appropriate labels, and while the bottles and labels pass along a travelling belt the latter are affixed. From the packing table the goods are placed in standard stock bins.

From the wets department we proceeded to one of the chemical packing rooms, where we noticed an ingenious bottle rack. It was explained that bottles from the washing machine (packed in trays) are placed on roller conveyor racks so that when the front tray is removed another takes its place. This room contains four benches, which are utilised for filling only. When filled the lines are placed on trolleys and run to the finishing counter which is fitted with a travelling belt; the remainder of the process is similar to that used for wets. Goods from this department are sent to standard stock, or, if special, to despatch, home or export. Passing into the "dry" floor we observed the packing of drugs and small parcels, including a few *ad hoc* chemical lines. Before leaving this floor we visited rooms constructed specially for the storage of B.D.H. medical products and essential oils.

On the floor above is maintained a working stock of drugs drawn from the firm's Islington Green drug warehouse; this department has control of the drug warehouse and all bulk stocks are drawn from there. We noticed several interesting operations, including the sorting of myrrh, gum acacia, senna pods and ginger. (We may mention, at this point, that we paid a special visit to Islington Green. In the warehouse we saw the art of drug sorting being practised on an extensive scale. It is easy, after watching a sorter at work, to appreciate the difference between crude drugs in original bales and the quality supplied by the wholesale druggist.) Our attention was next directed to the dispensary, a well-equipped department where a great number of difficult and foreign prescriptions and small recipes are prepared by a staff of women pharmacists, a form of service which is no doubt appreciated by the firm's customers. There is also a special room for poisons and D.D.A. lines.

This article would be incomplete without further reference to the assembly department. This point is the meeting place of the various products which complete an order. Specially packed lines, as they arrive, are placed in numbered bins, soon to be joined by standard stock; from here the completed order is packed and sent to the despatch department. During the time of our visit the loading dock presented a busy appearance. Goods were arriving continually on the roller conveyor to be promptly loaded on the waiting lorries.

PHARMACEUTICAL LABORATORY

PERHAPS nowhere at Graham Street is greater activity observable than in this busy department. The large scale production of galenicals is one of the main props of the B.D.H. business and a feature of which they are justifiably proud. It is difficult, of

No. 774705

NOT PASSED.

Date.....

Name.....

Description.....

Ex.....

Quantity..... No. of Containers.....

Delivered to.....



course, to enumerate the various processes carried on, or to describe, in any detail, the vast array of pans, stills and other apparatus in everyday use. When we arrived we found a batch of over 300 gallons of liquid extract of cascara just finished, and in course of being pumped to the storage tanks. In a kneader we saw 600 lb. of confection of senna in course of preparation, and close by 6 cwt. of syrup of squill was being filtered. We mention the quantities as an indication of the scale of production and may add that these operations are repeated at frequent intervals, the aggregate production being enormous. Scale preparations are made to perfection at Graham Street, but it would be tedious to detail the processes which result in the production of these examples of pharmaceutical elegance. B.D.H. chemical food is prepared in huge quantities and a filter press is used for the final clarification. In the manufacture of emulsions, a coarse emulsion is first prepared; this is pumped up to a tank from which it runs by gravity through homogenisers; the capacity of each unit is about 200 gallons per day. Our attention was drawn to the filling of kaolin poultice and we were informed that the output of this useful antiphlogistic preparation amounts to about 15 cwt. per week. All the kaolin used is sterilised, and the finished product is filled into metal containers by means of a worm filler. A complete range of ointments is manufactured, the plant including many mixers and a battery of ointment mills. For the manufacture of galenicals, rectified spirit is received into two 600-gallon tanks, each one being filled, on an average, once a week: water is pumped in to correct the strength and the adjusted spirit is then available for manufacturing purposes, being pumped as required to various floors. The tanks are fitted with floats which indicate the amount of spirit in stock. Industrial alcohol is stored in another room and is dealt with in a similar manner. Two vacuum ovens, each holding about 3 cwt. of drug, were next shown to us; these are used mainly for drying extracts or for spirit recovery. The milling-room is equipped with a giant disintegrator, five large edge-runner mills, including a special mill for white powders, chip-grinding mills, seed rollers and mechanical mortars.

From the pharmaceutical laboratory we were conducted upstairs to the tincture room, where we saw many rows of percolators, and in particular we noticed one of these connected to a still on a lower floor and used for ether extractions; this percolator is of tin-lined copper and has a capacity of about 400 lb. of drug. Others vary in capacity from one to 250 gallons; there are also hydraulic presses one of which, at the time of our visit, was pressing digitalis marc.

RADIO-MALT

RADIO-MALT, as every chemist knows, is a combination of malt extract with vegetable oils, which contains in standardised amount vitamins A, B₁, B₂ and D. Its manufacture is a complicated process which can best be described, perhaps, by commencing at the mash tubs where the germinating barley is sprayed with warm water by means of a slowly revolving spray. The mash is then run into a pan on a lower floor, pumped up from there into a vacuum pan and evaporated at a low temperature. This particular pan is equipped with recording apparatus which produces a graph showing the time at which the evaporation was commenced, the temperature throughout the process and the time of closing down. Each batch is numbered and the analysis typed on the back of the graph, so that not only is a complete record preserved, but exact control is rendered possible. A measured quantity of the malt extract is then run down to a mixer, the vitamin B and oils containing the vitamins A and D, are next added, and finally, the flavouring, the whole being then mixed; the batch is then passed through filters, when it is ready for packing. (Illustrations on pp. 734-735.)

It may be convenient at this point to explain briefly the production of the vitamins A, B₁, B₂ and D

already mentioned. Vitamin A is extracted from fresh liver, the liver being the storehouse in which all mammals accumulate vitamin A; it is concentrated by solvent extraction and purified by removal of cholesterol and other inert material. Its standardisation is effected by accurate spectrographic analysis, helped by the well-known Carr and Price test, which was originated in the B.D.H. laboratories. Vitamins B₁ and B₂ are derived from yeast, which also is the source of ergosterol from which pure vitamin D is made. The ergosterol is extracted by solvents and recrystallised, until quite pure as determined by melting point and specific rotation. It is then submitted to the ultra-violet irradiation of a mercury-vapour lamp and the pure vitamin D is separated by forming its crystalline 3:5 dinitrobenzoate and later regenerating the vitamin D in such a pure form that one gram represents 40 million antirachitic units.

To return to Radio-Malt: by means of a very high pressure in the chamber containing the finished preparation it is conveyed to the packing floor. From the tank to the jars, therefore, Radio-Malt is untouched by hand and is out of contact with the atmosphere. The next step is packing, but before this can be commenced jars must be washed, sterilised and dried. We were particularly interested in a giant washing machine, which is capable, we understand, of washing and drying jars and bottles at a speed of 5,000 per hour. Two operators feed the machine, which first sprays hot water inside and outside the jars, at the same time carrying them slowly through; a little further along (the internal mechanism can be seen by removing the cover of a small observation window) the temperature of the washing water increases. Hot air is then applied to the jars which, in about twenty minutes from the time of entry, are ejected in a perfectly clean and dry condition: they are immediately packed in trays and taken to the packing room by means of a runway. Specially designed all-nickel filling machines are used to fill the jars, each stroke of the filler giving an exact weight of the preparation. So keen is the control that the jars are examined one at a time by placing them over an illuminated screen, thus avoiding the risk of a faulty container. (These operations can be seen clearly in the photograph on p. 733.) After filling, the jars are placed on a travelling belt, capped, labelled and wrapped. Thus, Radio-Malt is manufactured by the B.D.H. from start to finish under conditions of absolute cleanliness and rigorous scientific control.

AMPOULE DEPARTMENT

THE preparation of ampoules is a pharmaceutical operation requiring not only a high degree of skill and accuracy, but the provision of elaborate facilities for work under sterile conditions. B.D.H. ampoules are prepared under the strictest control during every stage. Before entering the ampoule room, which is glass-enclosed, we were shown a filter and heater through which air is passed before being distributed at an ordinary temperature throughout the room; the filter comprises a number of frames with metal shelves which are saturated with antiseptic solution, the impurities in the air being taken up as it passes through. The room is provided with two separate doors, having between them a mat impregnated with a suitable antiseptic. Inside, a positive air pressure is maintained so that the opening of a door merely causes a draught outwards. The internal fittings are such that no dust can collect, and the walls and ceiling have been treated with a special paint. The lighting is particularly good (as can be seen from the photograph on p. 736), and the floor is of a special composition. These precautions, together with the meticulous care taken in the preparation and testing of the medicaments, ensure sterility, stability and uniformity and reduce any deterioration to the very minimum. Those substances which are not liable to oxidation are filled by means of a burette, a separate instrument being retained for each; in the case, however, of oxidisable preparations an

THE BRITISH DRUG HOUSES LTD



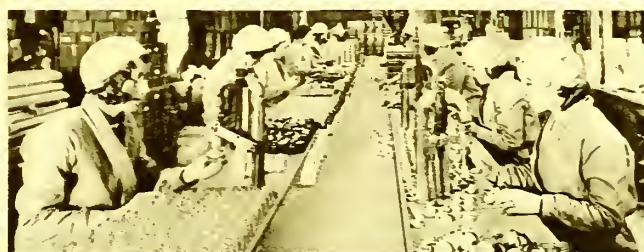
Sealing Glauber's salt in waxed packages with electric iron



A portion of the Home Sales Offices, showing pneumatic tube system



Packing "Eastern Foam" (centre) and "Radiomalt" (above)



Left, The packing of Radiostoleum
Right, Putting up chemicals for export



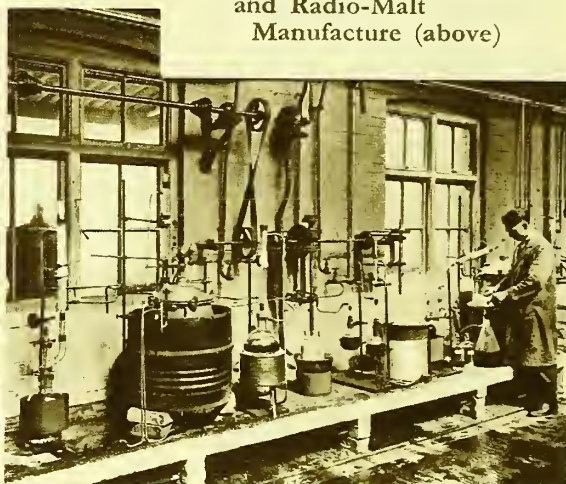


B.D.H. PRODUCTS

Phenolphthalein (left)
and Radio-Malt
Manufacture (above)



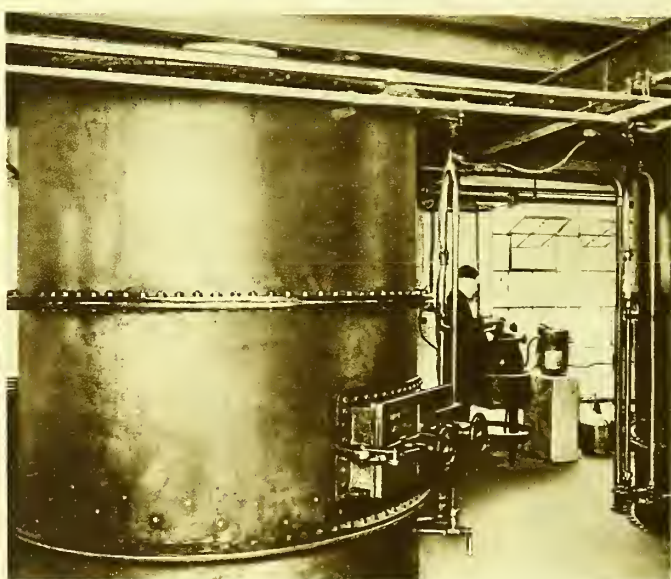
Manufacture of P.P.P. chemicals



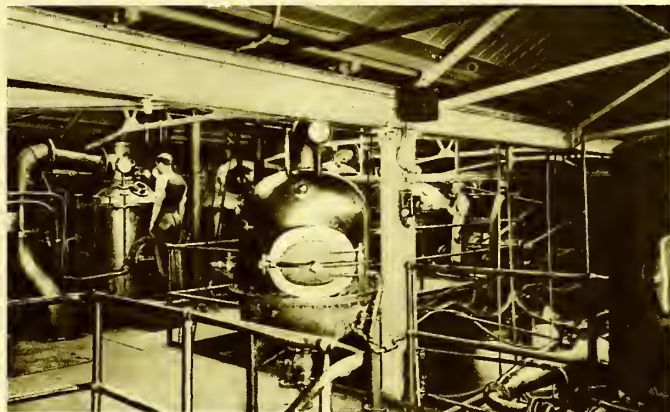
The synthesis of thyroxine



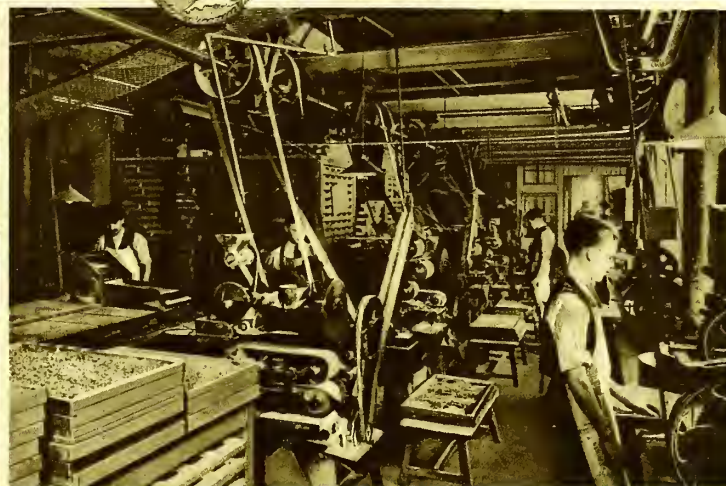
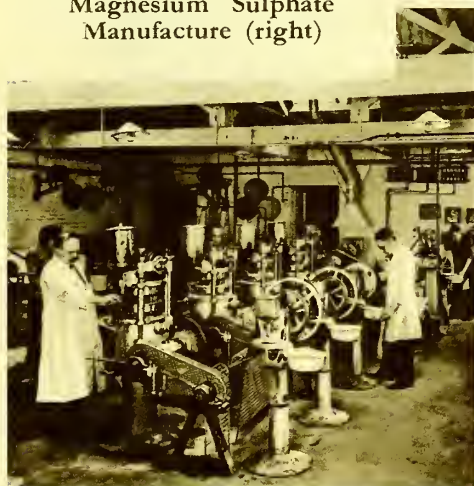
Organic synthesis carried on in the open air



Extractors for large scale



**B.D.H.
P.P.P. CHEMICALS**
Sodium Sulphate and
Magnesium Sulphate
Manufacture (right)

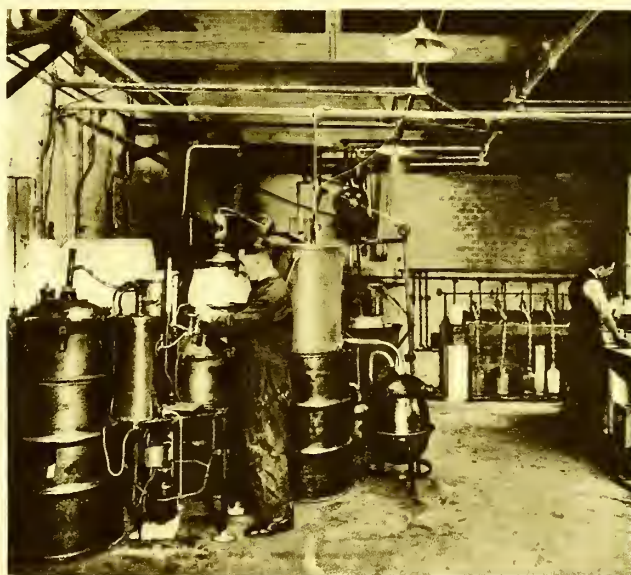


Some tablet-compressing machinery

A battery of pill-making machines



manufacture of alkaloids



High temperature vacuum distillation

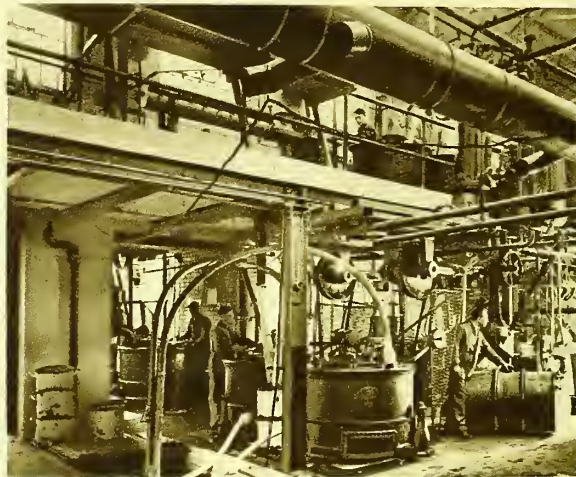


THE SCIENTIFIC SIDE

Laboratories and Testing Departments
of The British Drug Houses Ltd.



The recent addition to the Analytical Laboratories



Early stages in the manufacture of AB Insulin



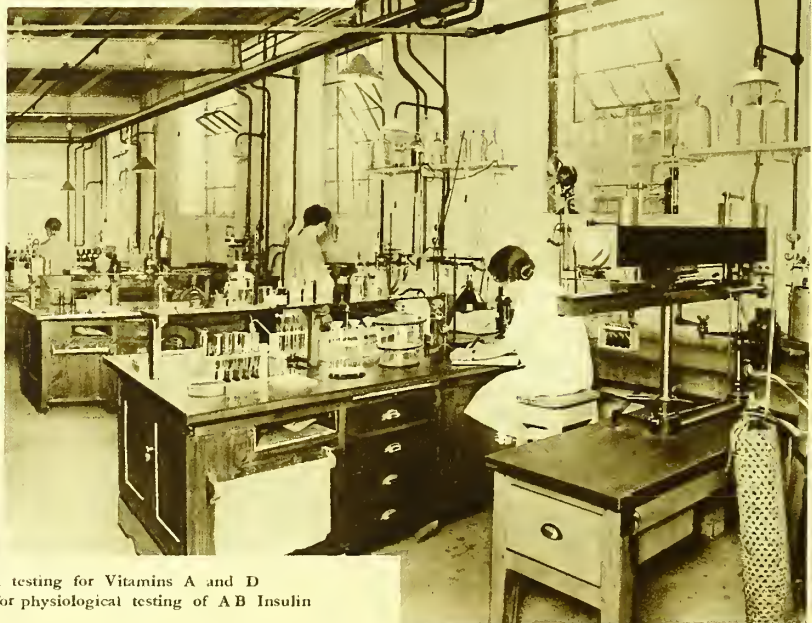
At work in the Ampoule Department



Estimation of Vitamin A by spectro-photometer



Left, Biological testing for Vitamins A and D
Right, Laboratories for physiological testing of AB Insulin





atmosphere of some inert gas is used. The finished ampoules are placed in trays and sterilised by means of an autoclave. We were interested also to watch the packing of hypodermic tablets; the operators work with gloved hands under glass screens, and tubes, corks, etc., are sterilised before use.

Outside the ampoule room is a department where girls are employed filling and packing radiostol and radiostoleum, two well-known and valuable B.D.H. vitamin products. The filling machines are duplicates of the already-described Radio-Malt fillers, except that they are plated with silver instead of with nickel; pressure on the substance is maintained by means of an inert gas. (An illustration of this department appears at the foot of p. 733.)

TABLETS, PILLS AND CAPSULES

THE plant at Graham Street used for the manufacture of all kinds of compressed tablets is, we think, one of the most up to date of its kind in the country. On entering the tablet department the visitor is reminded of the atmosphere of a tidy engineering shop, so mechanised has become the production of this type of product. B.D.H. tablets are prepared, of course, with materials passed and guaranteed by the analytical department. The rows of single and rotary compressors make an impressive sight, and when it is realised that in nearby fixtures are stored some 2,000 stock lines of tablets, continually being depleted, the reason for the activity becomes manifest. It is of interest to note that a separate specially ventilated room is maintained for the manufacture of tablets containing poisons; this room is equipped with its own machinery and drying cupboards. After granulation, the substance to be compressed is placed in trays and taken, loaded on trolleys, into a drying-room, where there is a circulation of air which has been previously filtered and heated. When steam is not available an electric heater comes into operation to prevent the absorption of moisture during non-working hours.

Pills are prepared, of course, in enormous quantities by the latest mechanical methods, the plant having an output of more than one million pills per day. We noticed a battery of fine double Colton pill machines and some extremely ingenious mechanical pill sorters which seem to be almost human in their selective powers. Technical skill is again evident in the Colton gelatin-coating machine by means of which pills are coated quickly, easily and efficiently. Pearl and sugar coating is applied to bulk quantities in a battery of coating pans, smaller coatiers being reserved for special recipes. (Some of the tablet compressors and pill-making machines are illustrated on p. 735.)

In the capsule department, which we understand will shortly be further extended to deal with the increased demand for B.D.H. capsules and perles, both machine and hand-made capsules are manufactured in large quantities. During our visit we were able to watch the preparation of tetraform capsules, intended for administration to sheep. The process is simple and consists of placing a sheet of gelatin (prepared elsewhere in the department) over one half of a mould; a measured amount of the liquid is then poured on, another sheet of gelatin placed over it and the upper portion of the mould placed in position; the whole is then subjected for a few moments to high pressure in a hydraulic press; the excess of gelatin being ripped off, there fall away the capsules correct in size, shape and dosage.

OTHER GRAHAM STREET ACTIVITIES

UNDER this heading may be described briefly a few other features of the Graham Street premises; these are extremely important as units in a great organisation but they do not require a separate paragraph for each. We may commence, perhaps, by mentioning that stocks of serums and vaccines and other preparations which are liable to deterioration are kept in a special

cold room. There is also a stock-room reserved for certain classes of special medical products; in this are included such important preparations as carotene, contramine, insulin, quinamil, radiostol, radiostoleum and liver extract, to select only a few from a long list of B.D.H. specialities. There are skilled workers in the special sections dealing with hand-made lozenges, pessaries, suppositories and ear-cones. Seidlitz powders, seltzogene powders, salines and effervescent preparations generally are manufactured in large quantities and packed by modern automatic methods. "Empties" are received, sorted and credit notes made out with a minimum of delay; bottles are sorted into crates and passed to the bottle washers, where they are washed and dried by machinery. There is a special staff of bottle-stopperers, in whose expert hands all stoppers are ground to ensure perfect fitting.

In the engineers' shop, well equipped with lathes, milling, grinding and polishing machinery, we noticed several items of plant undergoing overhaul and repair. The loading dock presents a scene of intense activity; lorries are continually being filled with hampers and trays for despatch to all parts of the country. B.D.H. transport is composed of vehicles ranging from carrier tricycles and light vans for short distances to giant lorries for the longer journeys; ample garage accommodation and expert maintenance is available. An illustration on another page shows the despatch yard with two six-wheel lorries being loaded with goods for the Midlands. The "Baby Austin" van seen on the left of the lorries is the latest type added to the fleet of small vehicles used for "express delivery" purposes in the London area. The total number of motor vehicles in use is thirty. The Liverpool and Nottingham depôts have their own delivery services for the districts in their respective areas.

AT WHARF ROAD

ON the Wharf Road side of the canal are to be found some of the most recent additions to the B.D.H. premises. Once over the water the visitor leaves, to a great extent, the pharmaceutical field and enters those in which pure and biological chemistry are applied. The premises consist of separate buildings, each one devoted, in the main, to a distinctive kind of operation, as for example the manufacture of sodium and potassium salts, inorganic chemicals, alkaloids, vitamins, synthetic organic chemicals, and so on. The advantage of this arrangement is obvious in dealing with materials which are frequently of a nature requiring special skill and experience. Owing to their particular character some operations are carried out in the open air. The Wharf Road site is so developed as to enable full advantage to be taken of the water frontage which, during the period of our visit, was being utilised to discharge raw material from barges.

SODIUM AND MAGNESIUM SULPHATES

ON leaving the electric transporter which crosses the canal, we proceeded to a building built specially for the manufacture of sodium and magnesium sulphates. The crude salt is shot from an overhead store into dissolvers and treated in solution for the removal of impurities; it is then pumped through filter presses into massive tanks (seen in the photograph on p. 735) and allowed to crystallise. The crystals are then removed from the tanks, which, incidentally, are most carefully protected from dust, and placed in a centrifugal machine; they are then passed into an elevator which takes them up to a grader to be separated into the different crystal sizes:—large, needle, and feathery. Sodium sulphate and magnesium sulphate require different methods of grading; the latter, after treatment in a centrifugal machine, is passed through a grid and taken by means of an elevator into a runway. As it runs along it passes through a spiral conveyor and warm air is pumped in an opposite direction to dry the salt.



PACKING ÆTHER PURISS, B.D.H.

FINE CHEMICAL MANUFACTURE

THE B.D.H. range of fine chemical products comprises some thousands of organic and inorganic chemicals used in scientific laboratories, and includes analytical reagents, indicators and standard stains. A very high degree of purity is maintained by strict analytical control. We passed first through a yard into a small room which is used exclusively for the purification of dyes for medicinal use and the manufacture of microscopic stains and indicators. The phenolphthalein plant, which is installed in another building, is extremely interesting and we were informed that it is large enough to supply the whole of the British demand for home and export. In a room nearby we observed the distillation of high-grade nitric acid and here also there is a special plant for the manufacture of Caprokol. The preparation of hippuric acid was proceeding during the time of our visit; this, we understand, is a long process and the plant produces about one cwt. per week.

In the inorganic chemicals department we were shown stages in the manufacture of ferrous sulphate, sodium ferrocyanide, sodium carbonate, chromium hydroxide, ammonium oxalate, calcium chloride, copper sulphate and potassium dichromate. The equipment of this laboratory includes a vacuum still and ovens, centrifugal machines and roasters and many crystallising tanks. At our request a jar of anhydrous ferric chloride was opened and we were able to admire the beautiful steely-black crystals before the stopper was quickly replaced and waxed over. In the next room we returned to pharmaceutical chemicals and watched the drying of potassium citrate and the preparation of ammonium chloride and barium sulphate.

ORGANIC CHEMICALS AND ALKALOIDS

THE production of organic chemicals, and, indeed, of all fine chemicals, is a section of the British chemical industry which has greatly advanced during recent years. Much of the progress made has been due to research work to which the B.D.H. have contributed in no small measure. In the organic chemical laboratory at Wharf Road have originated many new processes and manufactures, an excellent example being

the synthesis of thyroxine (shown in an illustration on p. 734), which was carried out on a small commercial scale for the first time in this laboratory. One of the most recent achievements has been the production of calciferol, a large quantity of which has been already used in the manufacture of B.D.H. vitamin products and by research workers at home and abroad.

In the laboratory, we were informed, some sixty or seventy separate operations are kept going at one time. The atmosphere is maintained, as far as possible, free from dust and at a constant temperature; all the incoming air is filtered, and, during cold weather, it is also warmed. As an example of the care exercised in every direction we noticed that a red light is shown over any operation which may be dangerous in regard to fire. Organic chemicals in course of preparation during the time of our visit included methyl-acetamide, glycollic acid, *o*-tolidine, anthraquinone, galactose, keratin, ethyl bromide and many others. We left this laboratory with a feeling of respect for the chemists by whose technical skill and ingenuity the production of such

highly complicated compounds is rendered commercially possible

In the alkaloid laboratory we were shown apparatus for the preparation of vitamin A by means of which a product 10,000 times as active as an average cod-liver oil was being produced. Crude drugs amounting to many tons at a time are treated in the huge extractors (illustrated on pp. 734-735); the extracted alkaloids are then purified by crystallisation.

LABORATORY CHEMICAL STORES

THE chemical stores occupy a long building containing numerous shelves on which a stock of chemicals arranged in alphabetical order is held; in this department a record is kept of each article in stock to the number of about 4,000. A glance over a pile of order sheets gave us some indication of the world-wide ramifications of the B.D.H. business, there being requests for supplies of fine chemicals from Oslo, Vancouver, Burma, Cape Town, Melbourne, Haifa, Berlin, New York, Amsterdam, Cairo, Basra and Trinidad, to select only a few. Most of the orders were from research workers, chemical laboratories and universities, a splendid tribute to the B.D.H. standards of purity and excellence.

MANUFACTURE OF INSULIN

THE A. B. brand of insulin, issued jointly by the B.D.H. and Allen & Hanburys, Ltd., was the first insulin made in Great Britain to be offered to the medical profession. The product is world-famed for its unvarying purity, activity, sterility and stability. It is made from pancreas which, on delivery, must be immediately frozen and kept at a low temperature. For this purpose, all the raw material received at Wharf Road is placed in a special cold room until required. The first stage is to mince the glands to a fine condition, and then to add the proper reagents and solvent. The mixture is delivered into a hydro-extractor where the liquor is separated and collected; that liquor is chilled to remove unwanted impurities. It is then filtered by means of a high-speed centrifugal filter and evaporated at a low temperature *in vacuo*. The process from there is directed at the separation of the insulin from admixed

proteins and is completed by a succession of operations which precipitate the insulin as the picrate. The picrate is then converted to hydrochloride which is obtained as a white powder. On account of the small amount of insulin which is manufactured from a large quantity of pancreas the final stages are reduced to quite small-scale operations. 600 grams of pure insulin, which, we were told, represents one week's run of the plant equals in round figures 12,000,000 units and requires for its production four tons of pancreas. It is estimated that at any time 100,000,000 units of A. B. insulin could be supplied at short notice.

Liver extract, B.D.H., is manufactured at Wharf Road by a process which has been tested and found to be efficient by the Medical Research Council. The product contains in small bulk the therapeutic principles of the original fresh substance; it is issued in tubes each containing the equivalent of half a pound of fresh raw liver. Livogen is a more recent introduction and consists of a concentrated liquid extract of liver combined with hæmoglobin and vitamin B.

PACKING SPECIALITIES

THE speciality packing departments at Wharf Road are designed on the mass production principle. The girl workers sit at long benches fitted with travelling belts on which the goods move from stage to stage. As an example of this method the packing of Eastern Foam may be considered. Jars are filled at one side of the table and boxes at the other; the cream is delivered to the table under pressure and is very quickly filled by machines, the jar or tin being placed on the travelling belt. As it moves along the table it is successively labelled, cartoned and boxed. Another good example is the packing of B.D.H. pharmaceutical chemicals. The cartons, after being automatically filled with the correct weight of substance, are placed on the belt and closed as they move along. Glauber's salt is filled into cartons lined with waxed paper, which is folded and then sealed with a hot electric iron (this operation is shown in the photograph on p. 733). The packing of æther puriss, B.D.H. (for anæsthetic purposes) is, obviously, an entirely different type of operation; in this case the ether is filled by means of a specially designed automatic filler. An inert gas is pumped into the bottles, the ether is run in and the container immediately sealed so that there is no contact with the air. The bottles are then wrapped in black paper (these operations are illustrated on the opposite page). Whilst on the subject of ether it may be explained that the still-house at Wharf Road is constructed to handle 1,000 gallons of liquor per day. The ether plant has been devised specially to remove the last traces of impurities, so that, in its finished condition, æther puriss, B.D.H., is quite free from peroxides and aldehydes. B.D.H. ether, whilst under manufacture, is never exposed to light or air, and the finished product undergoes stringent tests for purity.

PHYSIOLOGICAL LABORATORY

THE standardisation of medicinal substances which cannot be adequately tested by chemical means is carried on in the physiological laboratory. The laboratory is housed in a large, well-built room and is equipped with the necessary apparatus for the testing of ergot, pituitary extract, digitalis and other

drugs, as well as for the vitamin products. In the animal house we noticed rows of cages containing experimental rats which, we were informed, were on special diets. Each cage is labelled with particulars of the test for which its occupants are being used. We were interested to observe the scene shown in one of our illustrations (p. 736)—the routine weighing of the rats; particulars are carefully recorded on cards. In a second animal house is maintained a breeding stock of mice and rabbits. It is worthy of note that the animals, without exception, are extremely well housed and carefully looked after; the animal houses are maintained at the correct temperature by thermostatically controlled electric heaters. (The larger photograph at the bottom of p. 736 gives a view of the laboratories specially equipped for the testing of A.B. insulin.)

IN CONCLUSION

A WORD as to the *personnel* may not be amiss. The company's staff of trained chemists—Fellows and Associates of the Institute of Chemistry and university graduates—numbers upwards of thirty. These are assisted by a large number of junior chemists, for whom the fine chemical industry affords a unique training ground. In addition, there are employed between thirty and forty pharmacists, each of whom is a specialist in his own department. The technical staff includes, also, skilled mechanical and electrical engineers, whose retention is necessary for the purpose of keeping the buildings, plant and equipment in a state of the greatest efficiency. The total number of employees on the company's pay-roll exceeds 1,200. It is perhaps appropriate also—on the principle that the last is by no means the least—to give a list of those responsible for the capable and energetic direction of this great organisation. The board of directors is composed of the following gentlemen:—Charles Alexander Hill, B.Sc., F.I.C. (chairman and managing director); Reginald Robert Bennett, B.Sc., F.I.C.; Francis Howard Carr, C.B.E., D.Sc., F.I.C.; Alan Francis; Charles Mervyn Hill; Frederick Charles Oscar Shaw; Kenneth George Shaw.

In writing this article we have purposely refrained from retrospect. It is sufficient to state that there must have been continuous striving and growth during the past two decades for the scientific and technical resources and the manufacturing capacity of this company to have been brought to their present pitch of perfection. To-day, the B.D.H. organisation may truly be described as an outstanding centre of British manufacturing pharmacy.



A VIEW OF THE DESPATCH YARD

Scottish Cod-Liver Oil

A Note on an Aberdeen Industry

THE visitor to this year's meeting of the British Pharmaceutical Conference will find himself in one of the chief centres of the Scottish sea-fishing industry. No visitor should miss the early morning scene in the Fish Market, when the steam trawlers and liners land their catches ready for the sale which takes place at 8 a.m. The market is situated round the Albert Basin, at the upper end of which the quays have been enclosed and roofed over. Some distance along the Albert Quay, and facing the basin, is situated the head office and factory of Isaac Spencer & Co. (Aberdeen), Ltd., one of whose main activities is the manufacture of medicinal and cattle

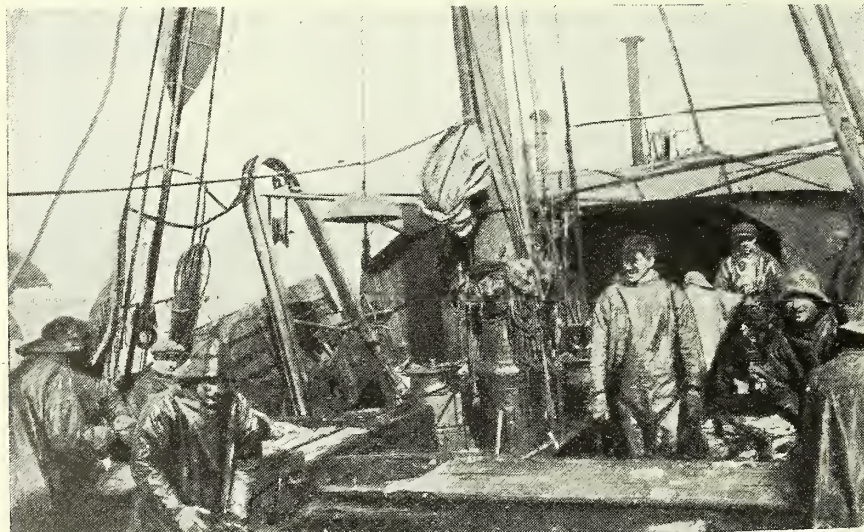
COD-LIVER OIL

from the oil collected from the trawlers as soon as they return to port. It is important to note that, although the trawlers may be many miles out at sea when the cod are caught, there is no delay in the extraction of the oil. When the fish are thrown into the "pond" on the trawler's deck they are immediately gutted and the perfectly fresh, not-an-hour-old livers are boiled with open steam for about twenty-five minutes in specially constructed receptacles with a capacity of about 100 gallons, and allowed to settle. The oil is then decanted off and filled into barrels, the residue, composed of liver tissue, etc., being run off into the

sea. When the trawler returns to port, the barrels of oil are collected by the company's special collecting boat, and brought ashore to

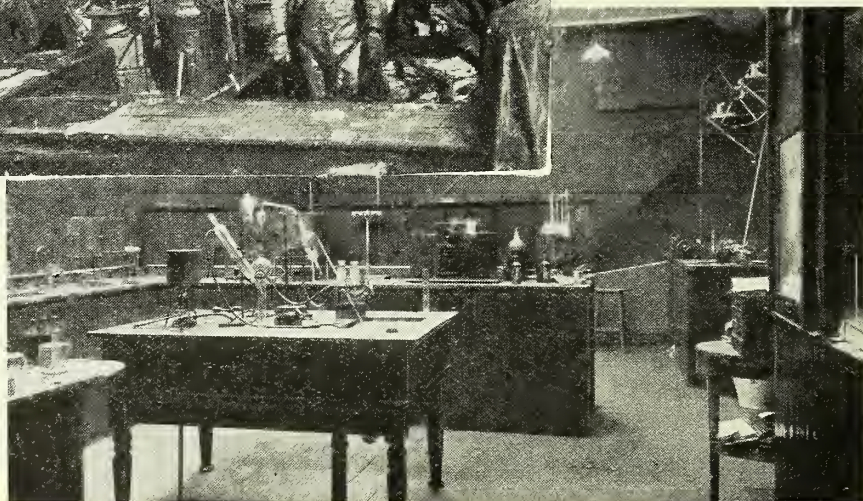
THE FACTORY

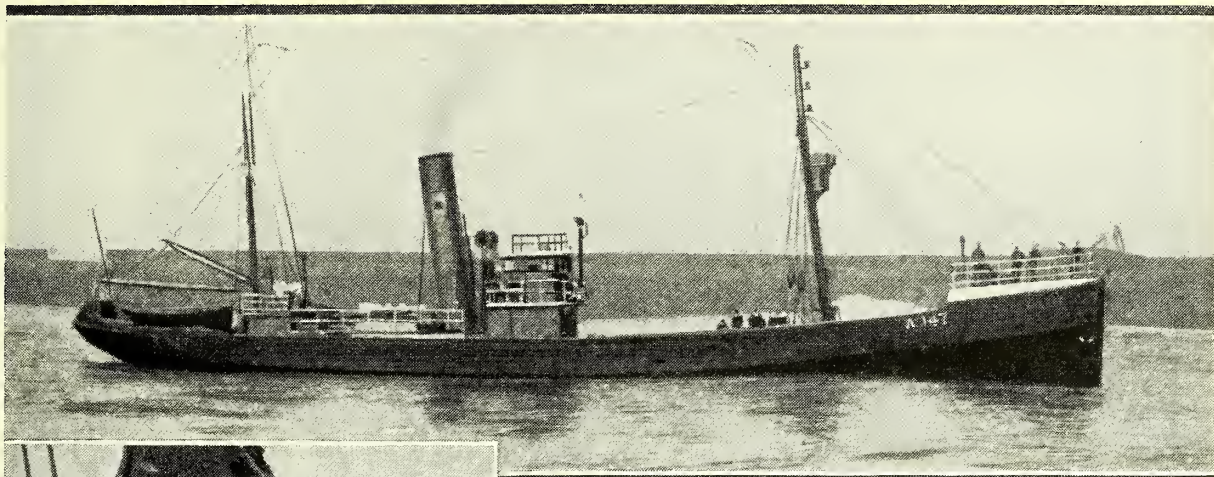
where the oil is tested. It is then graded into two qualities, No. 1 for medicinal purposes and No. 2 for cattle. The preparation of the oil for the market is a matter of the greatest importance. It is emptied into tanks, passed through a preheater, and then into a special cleaning machine, which has a capacity of nearly 1,000 gallons per hour. This process removes every trace of liver tissue, sediment and water. The cleaned oil is now pumped into other tanks, and, after further special treatment, it is filtered through modern plate-type filter-presses. The next process is to render the oil non-freezing, which means that it will remain clear at a temperature of 30° F. The oil is transferred to chilling tanks in a refrigerator, to be cooled slowly to 28° F. It is then filtered through plate-type filter presses, the oil from the presses being run through pipes outside the refrigerator into tanks, and from these it is filled into the familiar tin-lined barrels. It should be noted that throughout the whole process no chemical is used, therefore there is no possibility of loss of vitamin potency during purification. Cattle oil is treated in exactly the same way, except that in the chilling process the temperature is slightly higher. Cattle cod-liver oil, of course, is not quite so pale in colour as the medicinal quality, and the percentage of free fatty acids is slightly higher. In conclusion, it may be mentioned that the cod-liver oils manufactured at Aberdeen by Isaac Spencer & Co. (Aberdeen), Ltd., are of high vitamin content, and are specially produced and tested under conditions of spotless cleanliness.



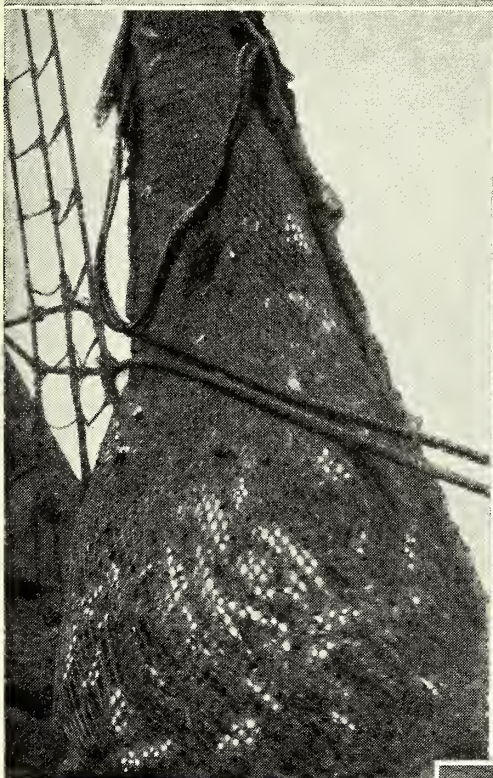
IN SHIP AND LABORATORY

Above: A scene in a cod-fishing vessel. *Right:* A view in the laboratory of Isaac Spencer & Co. (Aberdeen), Ltd., manufacturers of cod-liver oil. Photographs on this and opposite page by courtesy of Isaac Spencer & Co. (Aberdeen), Ltd.

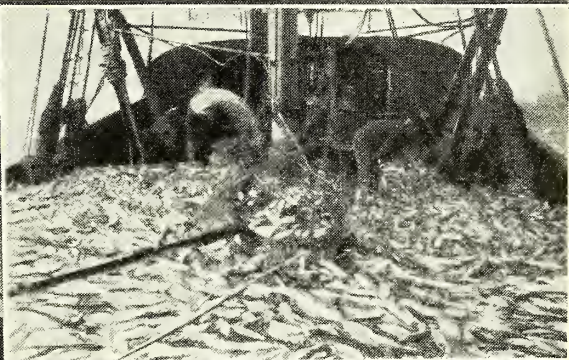




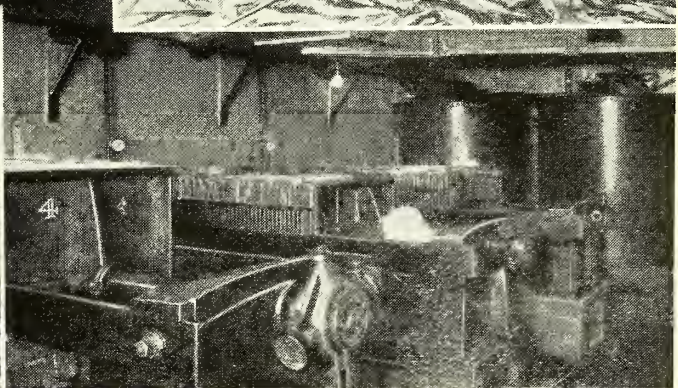
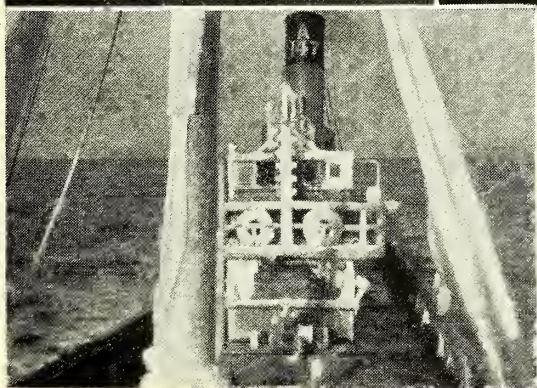
Above : An Aberdeen fishing vessel Left : A haul of cod coming on board
Below : Gulls round a rising net



Below : Sorting the catch



Below, Left : In wintry seas Right : Filter-presses of Isaac Spencer & Co. (Aberdeen), Ltd., Aberdeen





Cod-Liver Oil Industry in Newfoundland

By D. JAMES DAVIES, C.B.E., B.Sc., F.I.C.

Acting High Commissioner for Newfoundland

THE cod-liver oil industry of Newfoundland must have begun with Cabot's discovery. The cream-coloured liver of the cod must have attracted the attention of the early fishers; and the primitive people who inhabited Greenland, Lapland and Northern Labrador were acquainted with the healing virtues of cod-liver oil long before they came in contact with modern civilisation. The cod-liver oil of ancient times was a crude product. It was rendered, as the cod oil of commerce is rendered to-day, by allowing the livers to putrefy in suitable receptacles. The first definite improvement in the method of rendering was initiated in 1848, when Charles Fox, a chemist, of Scarborough, England, put up a factory in St. John's and refined the oil by subjecting the livers to indirect heat in pans with hot water bottoms. In 1888 Adolph Neilson, a Government inspector, introduced the chilling of the oil at a temperature below the freezing point of water and removing the stearine by filtering or pressing. This process produced a more palatable and, possibly, a more easily digestible article. The process required the construction of a large room with double walls, double top and double floor. The spaces between were closely packed with sawdust. Large pipes ten inches in diameter were installed along the sides of the room and fed with a mixture of 75 per cent. ice and 25 per cent. salt from the upper story. The temperature was maintained at from 18° F. to 25° F. Cod-liver oil in tanks or barrels was placed in the cold room and allowed to stand until it became quite thick with stearine. It was then strained through very fine calico bags.

STEAM REFINING

IN 1903 the modern method of steam refining by the action of direct steam on the fresh livers was introduced into Newfoundland. The process is the only one in use in the island at the present time. The plant is quite simple, comprising a small boiler sufficiently powerful to develop and maintain steam at from 75 to 80-lb. pressure. From the boiler a steam pipe leads to an open pan with a conical bottom containing from 60 to 100 gallons of livers. The steam churns up the livers, and if the pressure is maintained at about 75 lb. the livers are completely rendered and perfectly cooked in thirty minutes. The steam is then turned off, a few minutes are allowed for separation, and the sweet and pale oil is dipped out and poured through a strainer into a storage tank with a floating cover to keep the oil out of contact with the air and preserve the valuable vitamins. These small plants, to the number of 150 or more, are distributed around the extensive coastline of the island. They are subject to a rigid inspection by a staff of Government inspectors. These officials do not hesitate to cancel the licences of the manufacturers if conditions are not kept strictly according to the Government rules and regulations governing the cod-liver oil industry. The steam refined oil is poured into tin-lined barrels of 25 gallons capacity and sent to the big refrigerating plants at Harbour Grace and St. John's, where the oil is chilled by modern methods and the stearine removed by filtration. Government inspectors are in constant attendance at these plants and every barrel of oil is examined and branded before exportation. The modern refrigerating plant at Harbour Grace in the opinions of Doctors Drummond and Hawk, who inspected it in 1929, is the best of its kind in the world. The oil as it is delivered at the factory is tested by the staff and also by the Government inspector for that district. If up to standard, it is transferred to four

large tanks of capacity 5,000 barrels, equal to 125,000 imperial gallons. A 4-in. outlet at the bottom of each tank leads to the chilling press. This is made up of chilling tubes and filter press. The chilling tubes are composed of four large pipes 45 ft. long, 8 in. in diameter, with a 6-in. pipe inside. The oil is pumped through the inside pipe. The brine, which has already been chilled to a temperature of 18° F., circulates between the 6- and 8-in. pipes. A corkscrew agitator running along the full length of each 6-in. pipe brings about the uniform chilling of the oil. The oil, after passing through the four 45 ft. long pipes, is thoroughly chilled and is then forced through filter presses, the clear oil passing through and the stearine remaining behind. The process is continuous and the whole operation is done out of contact with the air. The clear oil is run into new tin-lined barrels of 25 gallons capacity and sealed with carbon dioxide.

THE HEIGHT OF THE SEASON

THE period of greatest activity in the cod-liver oil industry of Newfoundland is from the middle of July to the end of September. During the whole of that time, the cod is exceptionally well fed; first, on the millions of caplin that invade the coastal waters; next, on the great numbers of squid that come to the Newfoundland waters in August and September. Large scale experiments have shown that it requires 1,500 livers to produce 25 gallons of medicinal cod-liver oil. The average yield is one gallon of medicinal oil from three gallons of liver, or 25 gallons of oil from 75 gallons of liver. Thus 1,500 livers occupy 75 gallons. The average weight of the liver is approximately half a pound. The fishery is entirely a shore fishery, ideally suitable for cod-liver oil production. The fishermen visit their traps twice a day, in the early morning and late afternoon. The livers thus obtained are perfectly fresh, and efforts are being made by the inspectors to get all livers processed within two hours after the arrival of the fish at the landing stages. It is realised to-day that both the preventive and curative properties of cod-liver oil are due to the valuable vitamins which it contains. It is very rich in vitamin A and equally so in vitamin D. The following extracts from the "Relative Values of Cod-liver Oil from Various Sources," by J. C. Drummond and T. P. Hilditch (Empire Marketing Board—35) are of particular interest:—

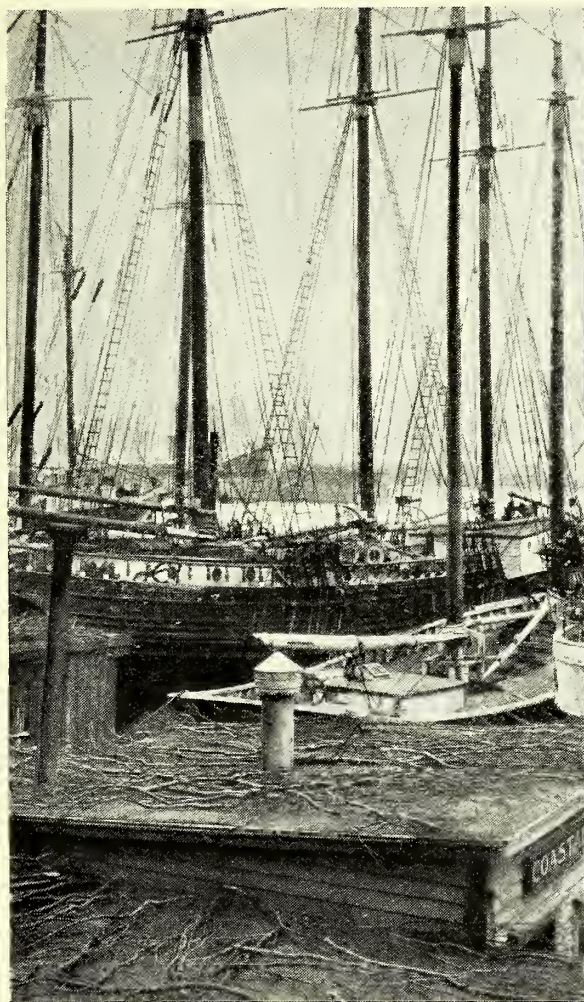
The figures for the estimation of vitamin A by the colorimetric method show that although there are wide variations in the oils from different areas, it is evident that on the whole the Norwegian oils are the lowest followed in increasing order by the Scottish, Icelandic and Newfoundland oils (p. 49).

The vitamin D tests also reveal the relatively high value of the Newfoundland and Icelandic oils (p. 51).

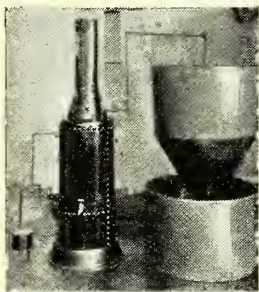
Dr. Drummond emphasises the highly satisfactory working of the system of inspection and the marked improvement in quality of oil that has resulted (p. 108).

Of the oils from the important cod areas studied, those from Newfoundland were found to be of richest vitamin potency (p. 124).

Dr. Holmes, in experiments with rats, showed that cod-liver oil from plump fish was over three times richer in vitamin potency than cod-liver oil obtained from lean and emaciated fish. This discovery appears to account for the superiority of Newfoundland oil. The oil is then manufactured in scrupulously clean factories subject to the most rigid inspection.



Roofs used as Cod-Drying Grounds



Oil Steam Refiner



A Morning's Catch



Cleaning the Cod



Cod-Drying Platforms at St. John's



Drying Cod at St. John's

Photos., High Commissioner and Exclusive News Agency

The New Yugoslav Pharmacopœia

By PROFESSOR DR. ANTUN VRGOČ

Director of the Pharmacognostic Institute, University of Zagreb, Yugoslavia

AFTER the fall of the Austro-Hungarian monarchy, pharmaceutical organisation in the newly-founded kingdom of the Serbs, Croats, and Slovenes showed a lack of unity. There was not merely one pharmacopœia official, but four—three from the former Austro-Hungarian territory as well as the Serbian Pharmacopœia legal in the former Kingdom of Serbia. In order to establish pharmaceutical uniformity the publication of a new pharmacopœia, which would be obligatory for the whole of the new state, was decided upon. The work of preparation of this new pharmacopœia was entrusted to the late Professors Domac and Janecek, and was to be finished at the end of 1919. Owing to the unstable political situation the newly-compiled pharmacopœia—in Croatian and Latin—was not printed.

IN 1926 a new commission, composed of twenty-two members, was formed for the purpose of preparing a new Yugoslav pharmacopœia, a committee of five being entrusted with the compilation. The rest of the commission and the committee, however, were to work in collaboration. At the same time the Pharmacopœia Serbica, ed. II, 1908, was made official for the whole kingdom. By 1927 the new commission had selected its *materia medica*, and published its findings. At the present time the commission has got prepared practically all its material for the new pharmacopœia, which will be published at the beginning of 1933. The pharmacognostic portion has been ready for a year, and the editor of this section, Professor Vrgoc, has also written a commentary, which is to serve as a textbook for pharmaceutical and medical students. In comparison with the present pharmacopœia, the new book will be much more comprehensive. The Pharmacopœia Serbica II contains 329 pages with 477 preparations, while the new Yugoslav Pharmacopœia will have 650, of which 176 are galenicals (39 more than in 1908), 271 pharmaceutico-chemical products (102 more), and 119 drugs (11 more), and will contain about 700 pages. In contrast to the present Pharmacopœia, there will be new chapters on serums, vaccines, sterilisation, salvarsan and antidotes, with a list of Serbo-Croatian plant synonyms and diverse tables. In the case of potent drugs, minimum, maximum and daily doses are given. Nearly the whole of the pharmacognostic part, as well as a portion of that including the pharmaceutico-chemical and galenical preparations, has been elaborated from the Croatian Pharmacopœia II.

OF the 119 official drugs 42 are indigenous, and thus 35 per cent. of the supply can be covered at home. Among the eleven newly added drugs are the following: *Herba teucrii mari*, *herba thymi*, *herba convallariæ majalis*, *herba ledi palustris*, *herba verbenæ*, *cortex rhamni fallacis*. [The pharmacognosy of *Rhamnus fallax* was the subject of an article by Professor Vrgoc in THE CHEMIST AND DRUGGIST Special Issue of June 28, 1930.—EDITOR.] The nomenclature of the drugs follows that of the Brussels Conference. The drugs are briefly but adequately described, macroscopical and microscopical characters being given. Examination and identification of powders is described in the case of forty-two drugs, which are often used in powder form in medicine. These include *ipecacuanha*, *zingiber*, *strychnos*, *sinapis*, *senna*, *kola*, *artemisia*, *cinchona*, *hyoscyamus*, *mentha*, *belladonna*, *stramonium*, *digitalis*, *capsicum*. A few drugs are described by the Pharmacopœia as whole drugs, also as not comminuted, these including *zedoaria*, *amygdalus*, *cannabis*, *colchicum*, *chondrus*, *cubeba*, *fruct. cardamomi*, *galla*, *lichen islandicus*.

IN the determination and estimation of active principles, e.g., essential oils and alkaloids, the drugs have to meet pharmacopœial requirements in a minimum content. The following standards have been fixed.—

Valerian, 0.5 per cent. essential oil; chamomile, 0.3 per cent.; *herba thymi*, 1.0 per cent.; *flos lavandulæ*, 1.0 per cent.; *rhiz. zingiberis*, 1.5 per cent.; *herba hyperici*, 0.01 per cent.; *fol. eucalypti*, 1.5 per cent.; *fruct. anisi*, 1.5 per cent.; *fruct. carui*, 5 per cent.; *flos caryophylli*, 16 per cent.; *flos cinæ*, 1.0 per cent. *santonin*; *sem. arecæ*, 0.2 per cent. *arecoline*.

With reference to the last-named the German Pharmacopœia requires 0.4 per cent. of *arecoline*. This requirement is too high. The majority of drugs are ordered, or permitted, in a comminuted condition; a few drugs, however, must always be used whole, e.g., *cubeb*, *galangal*, *cardamoms*, *strophanthus*, *colchicum*, *sambucus*, *cnicus*, *cascara*, *sarsaparilla*. In ash determinations the Pharmacopœia permits from 1 to 2 per cent. above the maximum per cent. of ash, e.g., in *ipecacuanha*, 5 per cent.; *senna*, 12 per cent.; *punica*, 17 per cent.; *stramonium*, 21 per cent.; *hyoscyamus*, 24 per cent.; *carduus*, 18 per cent.; *belladonna*, 15 per cent.; *digitalis*, 13 per cent.; *quebracho*, 8 per cent.; *farfara*, 20 per cent.; *cinna*, 10 per cent.; *crocus*, 14 per cent.; *rheum*, 14 per cent.; *areca*, 3 per cent.; *aloes*, 3.5 per cent.; *asafetida*, 15 per cent.

PHARMACO-CHEMICAL ESTIMATIONS

PHARMACO-CHEMISTRY is the best method in the estimation of drugs; and drugs in the Yugoslav Pharmacopœia can be divided into four groups in accordance with the pharmacognostic-chemical methods for their evaluation.

I.—DRUGS FOR WHICH THE PERCENTAGE OF ACTIVE PRINCIPLES IS NOT GIVEN.—Among these are *capsicum*, *citrus*, *tilia*, *malva*, *althea*, *uva ursi*, *quillaia*, *linum*, *herniaria*, *ononis*, *carduus*, *tussilago*. In all these drugs morphological and anatomical characteristics only are given.

II.—DRUGS FOR WHICH METHODS FOR ESTIMATION OF ACTIVE PRINCIPLES ARE GIVEN.—Volumetric methods are used for *strychnos*, *hyoscyamus*, *punica*, *opium*, *lobelia* and *ipecacuanha*.

DETERMINATION OF ALKALOIDAL CONTENT IN CORT. GRANATI

7 gm. pomegranate bark in fine powder is placed in a bottle of 150 c.c. capacity, and 70 gm. of ether poured over it. After vigorous shaking, 7 gm. of sodium hydroxide solution is added and the whole allowed to stand for half an hour, with frequent shaking. The clear ethereal liquid is filtered through a plug of cotton-wool into another bottle in which there is 5-10 drops of water, then vigorously shaken and allowed to stand. 50 gm. (= 5 gm. pomegranate bark) of the clear ethereal liquid is poured into a small flask, 5 c.c. *N/10* hydrochloric acid and 5 c.c. water added then two additions of 10 c.c. water, and shaken; lastly 10 c.c. ether and a few drops of methyl red solution are added and *N/10* soda solution run in until the colour changes. Not more than 3.65 c.c. *N/10* soda must be required, corresponding to a minimum content of 0.4 per cent. total alkaloids. 1 cc. *N/10* hydrochloric acid = 0.01475 gm. alkaloids.

Gravimetric methods are used for *manna*, *jalap*, *kola*, *thea*, *colchicum* and *glycyrrhiza*.



III.—DRUGS FROM WHICH NOT ALL THE ACTIVE PRINCIPLES HAVE BEEN ISOLATED.—These include rhubarb, aloes, senna, frangula, purshiana, with those the constituents of which show great variation, e.g., ergota, filix. The pharmacopœial extracts are estimated by means of solvents. In fol. digitalis, ergota and rhiz. filicis there is an approximate method for the determination of active constituent. In anthraquinone-bearing drugs a colour test is given. The Tschirsch method is used for ergot in the ergotamine determination: To 1 gm. of ergot 20 c.c. ether is added, then 10 drops ammonia and 20 c.c. water. A red solution is obtained (sclererythrin). After frequent shaking the ethereal liquid is separated two hours later and evaporated and the residue dissolved in glacial acetic acid and filtered; to the filtrate concentrated sulphuric acid containing iron chloride is very carefully added. At the junction of the two liquids a blue-violet zone is formed (ergotamine), but no or only a very slight pale yellow (protein amines) appears. This test shows the presence of at least 0.02 per cent. of ergotamine.

IV.—RESINOUS DRUGS, BALSAMS AND SOME GUM-RESINS.—The Pharmacopœia leaves the evaluation to be carried out by means of solvents (e.g., alcohol, ether, petroleum ether, water); this is because resins can usually be made to conform to the pharmacopœial specifications even though they are adulterated. As an example asafetida is tested for purity as follows:—

One gram of freshly powdered asafetida is shaken up with 20 c.c. of ether and allowed to stand for twenty-four hours. The residue is dried at room temperature and weighed; the weight of the residue must not be more than 0.58 gm. If the ethereal solution is poured slowly into 300 c.c. of petroleum ether (b.p. under 40° C.) and the resultant deposit collected and weighed, the weight must be not less than 0.1 gm. If the residue insoluble in ether is extracted with 20 c.c. of alcohol and the insoluble portion dried and weighed, the weight must not be more than 0.34 gm. If the residue from the alcoholic extraction is treated with water until one drop of the filtrate added to alcohol does not produce turbidity, and the remaining residue is dried and weighed, the weight must not be more than 0.20 gm. Asafetida on microsublimation produces yellow crystals, which in a solution of potassium permanganate give a vanillin odour (ferulic acid). The ash must not be more than 15 per cent.

IN addition to the chemical identification of drugs, microscopical methods for a number of drugs are included. Drugs of animal origin only number two, castoreum and cantharis. Of the active principles of drugs the following occur:—Adonidinum, anetholum, cineolum (eucalyptolum), colchicinum, cotoinum, emetinum, histaminum, hypophysinum, lobelinum hydrochloricum, papaverinum hydrochloricum, scopolaminum hydrobromicum, strophantinum, theobrominum, theophyllinum, tiraminum, veratrinum, vanillinum, yohimbium hydrochloricum. Of the 102 chemical preparations it may be of interest to mention the following:—Acidum phenylbarbituricum, acidum phenylchinolin-carbonicum, acidum diaetyl-barbituricum, acidum trichloracetum, aethylum chloratum, aethylum *p*-amidobenzoicum, chininum aethyl-carbonicum, dextrinum, dextrose, hydrargyrum bijodatum rubrum, hydrargyrum oxydatum rubrum, hydrargyrum oxycyanatum, hydrargyrum salicylicum, kalium glycerinophosphoricum, kalium kakodylicum, kalium hypophosphorosum, magnesum peroxydatum, manganum hypophosphorosum, phenyldimethyl pyrazolonum, phenyldimethyl-salicylicum, pix pineperina, salvarsani præparata, terpenum hydratum, tropacocainum hydrochloricum, uretanum. The nomenclature of chemico-pharmaceutical preparations follows that of the drugs, and is in accordance with the agreements at the Brussels Conference. Micro-chemical as well as macro-chemical methods for evaluating preparations and drugs are not prescribed, nor are registered commercial trade marks given. Two examples illustrate the style of the chemical monographs:—

NATRIUM NITROSUM

NaNO_2 , molecular weight 69.01

contains not less than 93.5 per cent. sodium nitrite.

Characters and Tests.—White or pale yellow sticks having a salty taste, or in crystalline hygroscopic masses, readily soluble in water, less so in alcohol. An aqueous solution colours red litmus blue, and gives a yellow flame coloration. On the addition of dilute sulphuric acid to an aqueous solution of sodium nitrate, brown fumes are evolved. An aqueous solution (1 to 9), after warming with nitric acid, must show no turbidity on the addition of barium nitrate (test for sulphate), and must not become opalescent on adding silver nitrate solution (test for chloride). If 1 gm. of sodium nitrate with 1 gm. of ammonium chloride is dissolved in 5 c.c. of water in a porcelain dish, and evaporated to dryness, the residue redissolved and acidified with acetic acid must show no change on the addition of a few drops of sodium sulphide solution (absence of arsenic, antimony and heavy metals).

0.5 gm. sodium nitrite is dissolved in water in a 100-c.c. flask and the solution made up to the mark with water. 20 c.c. of this solution is diluted with 100 c.c. of water, 10 c.c. of dilute sulphuric acid added and *N*/10 potassium permanganate solution run in until the solution is pink. This solution is heated to 40°, and titrated further until a dark red colour is produced. At least 27.1 c.c. of *N*/10 potassium permanganate solution must be required, equivalent to a minimum of 93.5 per cent. of sodium nitrite; 1 c.c. *N*/10 potassium permanganate = 0.00345 gm. NaNO_2 . To be preserved in a well-closed vessel.

COTARNINIUM CHLORATUM

$\text{C}_{12}\text{H}_{11}\text{O}_3\text{N} \cdot \text{Cl}$, molecular weight 291.61

Characters and Tests.—A yellowish, micro-crystalline powder, readily soluble in water, with more difficulty soluble in alcohol, and on strongly heating chars and decomposes. To a solution of 0.1 gm. cotarnine hydrochloride in 3 c.c. of water, three drops of sodium hydroxide solution are added; the addition of each drop producing a white turbidity, which must disappear completely on shaking (absence of other alkalis). If to this solution 0.3 c.c. of ether is added and well shaken, a white crystalline deposit quickly settles and the supernatant liquid must be clear or only slightly yellowish. The deposit when washed with water saturated with ether should melt after drying in a desiccator. The aqueous portion at 130°–132°, acidified with nitric acid, gives with silver nitrate solution a white precipitate. On drying at 100° cotarnine hydrochloride should not lose more than 12.5 per cent. of its weight. 0.2 gm. cotarnine hydrochloride, on burning to ash, must leave no ponderable residue (absence of inorganic salts). It must be carefully preserved in a well-closed container.

GALENICALS

IN the galenical portion of the Pharmacopœia are the following:—Solutions, 25 (none appeared in the former Pharmacopœias); syrups, 19 (previously 14); wines, 6 (previously 7); waters, 4 (previously 14); ointments, 19 (previously 13); tinctures, 32 (previously 31); extracts, 25 (previously 22). Newly introduced extracts are:—Extractum colocynthidis, extractum fœcis fluidum, extractum frangulæ, extractum veri mari fluidum, extractum thymi fluidum. Aromatic waters are prepared from the corresponding essential oils, and where possible are prepared extemporaneously. All extracts are prepared by percolation and concentrated by evaporation on the water bath, not *in vacuo*, the idea being that this process can be conducted by the pharmacist himself, whereas evaporation *in vacuo* is not practicable in every pharmacy. Tinctures are prepared by maceration, in the majority of cases with 66-per-cent. alcohol, but for those which contain considerable amounts of gum resin 96-per-cent. alcohol is used.



Perfumery in Etruscan and Roman Times

By PROFESSOR GUIDO ROVESTI

THE history of perfumes, cosmetics and essences has had many exponents, among whom may be mentioned Eugene Rimmel, S. Gildemeister, J. S. Thompson, O. Reveil, Felix Cola, without adding numerous minor writers who have contributed to reviews or encyclopædias, but whose works have treated the subject in too general terms, or whose writings show absence of original research, fragmentary documentation or neglect of the more recent discoveries, and often no inkling is given by them of the foremost place that the Italian peninsula has held in this art since the earliest times. The present article will fill in some of the *lacunæ* in the story. There is no pretence that the subject will be developed here in its entirety, but there is the hope that patient and often difficult research work in libraries, archives and museums may be continued by others interested, if indications are given by the author as to the right road to be followed.

ORIGINS OF PERFUMERY

THE use of perfumes and cosmetics may be considered as old as mankind from the threshold of civilisation, and as being partly responsible for the æsthetic transformation of primitive humanity. Mantegazza said in effect that nature left mankind hirsute and stinking, with clawlike extremities and verminous bodies, but civilisation and the pursuit of beauty have shaped from this, finally, the Venus of Milo and the Apollo of Belvedere. But this evolution must necessarily have been slow; and it is a logical conjecture that for many centuries humanity, to obtain its refinements of "luxury" products, did not utilise anything but those raw materials directly furnished by nature. Caius Pliny the Second, in his "Natural History," asserts that Asia was the first part of the world to make use of perfumes and unguents; and such a statement cannot be doubted when it is remembered that here was the cradle of the human race and an oriental civilisation which preceded every other. The most ancient historical documents, indeed, are Egyptian, and date from as far back as 4000 B.C. The first formula known of an Egyptian perfume or aromatic substance deciphered from hieroglyphics inscribed on a monument of the first Pharaoh is the following, according to Loret's work, "L'Egypte au temps des Pharaons," published in Paris in 1899: Carobs 1 han 3/20, incense 4 ten 1 qad, storax 6 ten, aromatic calamus 2 qad 1/2, asphalt 1 qad, lentiscus 1 qad, Tekh seed 1 qad 1/2, wine 1/2 han, water 1 han 1/20.

Numerous makers of perfumes and cosmetics were found at Alexandria, where was produced the special balsams used for embalming the dead in the process of mummification. The ancient sacred books contain many references to perfumes and aromatic substances, and the Bible shows in what esteem these substances were held by the people of Israel. Instructions for the upkeep of the altar are found in Exodus 30: "And thou shalt make an altar to burn incense upon. . . . Moreover the Lord spake unto Moses, saying, Take thou also unto thee principal spices, of pure myrrh five hundred shekels, and of sweet cinnamon half so much, even two hundred and fifty shekels, and of sweet calamus two hundred and fifty shekels, and of cassia five hundred shekels, after the shekel of the Sanctuary, and of oil olive an hin. And thou shalt make it an oil of holy ointment, an ointment compound after the art of the apothecary."

Among all the races of antiquity perfumes and cosmetics were ascribed to a divine origin; Phœnicians, Persians, Egyptians, the Magi, Greeks and Romans, all believed that it was some divine personage which

descended from the skies to teach womankind how to augment her natural beauty by means of cosmetics. There are many variations on this theme. For a long time the use of aromatics was limited to propitiatory offerings to divinity by means of smoke (*per fumum*, from which is derived "perfume"). Aromatic fumigation, at first simple, then complex, slowly losing its exclusive religious or sacred significance, was gradually introduced at a later period for hygienic purposes, to correct foul or vitiated air in insalubrious localities, to embalm corpses, to prevent or combat disease or contagion, and finally to be united with cosmetics (from the Greek *κοσμεω*, I adorn) used to make beautiful or rejuvenate the body, and so was born the *ars unguentaria* or *myrobrecharia*, forerunner of modern perfumery.

ETRUSCAN PERFUMES AND COSMETICS

THE race of people in the Italian peninsula which first rose to a high degree of civilisation were the Etruscans, whose origins are a subject of deep historical research. There are four theories on the origin of this primitive people. One is that they descended from the fusion of a colonising tribe from Asia Minor. This theory is firmly held, and Ducati, in his study of the Etruscans, gives many reasons for an Asiatic descent; an important indication is the fact that the Etruscans were adepts in the preparation and presentation of perfumes and cosmetics, an art of oriental origin. Etruscan tradition begins in the eleventh century B.C., but the immigrations and colonisation must have taken place during the eighth century. Towards the end of the fourth century B.C. the Etruscans were undoubtedly the most powerful people in the Italian peninsula, and they held their position until another people, the Romans, became strong and overcame them. The Etruscans were skilled in the preparation of perfumes and cosmetics, whether on account of their ethnological origin or whether from their keen love for everything that could make the human body graceful.

There were three catalogues of aromatic products: mixtures of aromatic substances intended to be burnt in houses and temples; ointments prepared by macerating aromatic substance in oil, in fats, or in a vehicle composed of fatty or greasy substances mixed with wine, water or honey; various cosmetics containing antimony, lead, and meal (cereal); and diverse substances to which were often ascribed thaumaturgic properties. Perfumes for sacred and profane fumigation were usually burnt in incense burners (cage-shaped containers, which were used in the same way as the ecclesiastical *turibolo* to-day), or in incense burners shaped like wagons and mounted on tripods, on small altars or in special vases of ceramic ware. The ointments and cosmetics were preserved in artistic vessels of a variety of shapes, known as alabastra, bombyli, lekitoi, or aryballos, according to the shape, and which were made of alabaster, glass or stoneware, but generally in ceramic ware, painted with inlaid designs. These objects are common in Italian museums; the richest collection is in the Royal National Museum of Villa Giulia, Rome, where are revived the phases of life and crafts of the Etruscans, and where are exhibited perfume containers of most original designs, perfume lockets in the form of jewellery, and the most famous bronze chests or caskets called "ciste," intended to contain the whole range of feminine toilet articles as well as perfumes and cosmetics. The illustrations show how much attention the Etruscan craftsmen gave to the preservation of perfumery, and how far this distinguished race had progressed in art in general and in metal work and ceramics. Professor Bendinelli's work on the history of Etruscan art may be consulted for further information.

GREEK COLONIES IN ITALY

ALMOST contemporaneous with the advent in Italy of the Tyrenians or Etruscans was the Greek migration, due to a great demographic increase, which forced these people to a colonial expansion unparalleled in the history of the early races on account of its rapidity and completeness. The first of the Greek colonies on the Italian peninsula was founded at Cuma, about 1050 B.C., to be followed by colonies at Pozzuoli and Naples. But the principal movement of the migration took place three centuries later, and it this that historians refer to as the "second Hellenic colonisation." There arose in Sicily Nasso, Syracuse, Catania, Leontini, Messina, Megara, Gela; on the southern coasts of the peninsular Sibari, Taranto, and other centres. The founders of these colonies subdued in a short time the native peoples, introduced their language and customs, and formed republics absolutely independent of their mother country. These republics went under the name of Magna Grecia, and attained a high degree of prosperity until broken up and made subject to Rome about the third century B.C. In these Greek colonies the art of perfumery flourished no less than in Etruria; and the Etruscans learnt much from the Greeks, especially in the way of presenting the perfumes in an elegant manner. The greater part of the shapes and decorations on Etruscan vases for holding perfumery are in the Hellenic style, and are copies of those vases which came from the potteries at Ruvo, Canosa, Taranto, Posedonia, Pesto and Anzi. In the "Story of Plants," by Theophrastus, in Book IX, cap. 4, there is given a list of the principal substances which the Greeks made use of in perfumery. A passage in the Dialogues of Lucian tells us that the Greek women made an immoderate use of all substances which would perfume or beautify the body.

" . . . if one could see the women as soon as they arise in the morning, one would adjudge them more dirty and nauseating than . . . monkeys. . . . they shut themselves up in their houses, and do not wish to be seen by any man. Old women are surrounded by a multitude of maids . . . and with diverse unguents they plaster the wretched face, with no application of pure and limpid water . . . but with applications intended to render more pleasant the bad complexion. Forming thus a procession, each of the maidservants bears a different instrument: silver basins, flasks, looking glasses, jars of noisome mixtures; some to make beautiful the teeth, others to darken the eyelashes, but the greater part of the time is spent in combing the tresses, bleaching the hair . . . falsifying nature, or making it black. The women spend on their coiffures the fortunes of their husbands, and all Arabia is breathed out of their hair."

The Greeks made large use of ointments for the cure of many diseases, according to the doctrine of Prodicus of Selimbria, a disciple of Æsculapius, and founder of iatraliptica, or medication by means of unguents. But this did not succeed farther than to increase the consumption of ointments for luxury purposes and to create a fashion of applying ointments to every part of the body. The Greek colonies and Etruria not only used the products of their own manufacture, but often imported from other countries with which they traded. Recent archaeological research on the colony of Sibari reveals that the coastal navigation and trading in perfumery and vases furnished the regions of Central Italy, and particularly Etruria and Campania. In the Antiquarium of Reggio Calabria are numerous examples of beautiful containers for perfumes and cosmetics of these Greek colonies, recovered from tombs or by excavation; and there are indications of the commerce which then took place. Those which are illustrated show an elegant series of alabastra, lekitoi, balsamari, guttus, askoi, pyxides and types of special vases, in ceramic of the Greek colonies, as well as types of alabastra and amphora in filigree work, and other containers of the perfumes imported from the Orient.

ROMAN ARTS OF PERFUMERY

THE ancient Romans, a military people, despised every refinement, and their principal attention was focused on becoming a great race and making their State powerful. Coming into contact, however, with the Etruscans, with the Greek races, Phœnicians, Egyptians and other peoples of Asia and Africa, they gradually became attached to their respective refinements; and perfumes and cosmetics were, among these, the first luxuries to be adopted. The use of such products must have become general from about the time of Caius Julius Cæsar, that is, about 100 B.C., and the use became more immoderate, descending finally to abuse during the whole of the epoch of Imperial Rome, which was the epoch of antiquity in which the art of perfumery reached perfection. Seneca, the philosopher, in his work, "De Vita Beata," has this passage: "What part remains of their body which is not subject to some pleasure? Of a certainty, no part, because neither the nose need remain without its enjoyment, and therefore it is willed that everything might be saturated with perfume in that place of orgy and luxury." The perfumer's art of the Imperial epoch was particularly in request to contribute to the magnificence of suppers and feasts; and Petronius, the famous arbiter of fashion, in order to warm the hall of his palace used cedar-wood impregnated with rare perfumes.

Perfumed wine was in use at feasts, and Marcus Gavius Apicius, a contemporary glutton with Tiberius, has left a collection of recipes in his gastronomic manual, "De Re Coquinaria." The flavours preferred were those of violet and rose, and special wines termed "conditi mirabili" were made aromatic with saffron, lentiscus, mastic and pepper. But it did not suffice to drink perfumed wines; the guests used beakers of fine pottery, the clay for which was mixed with myrrh, storax and lasting aromatics, in the making of which were the specialised ceramic workers of Rhodes and Samos. When spectacles were staged in the circuses the people in the amphitheatre were sprinkled with perfume, which increased the enjoyment. Caius Suetonius Tranquillus, in his lives of the Cæsars, describing the fantastic luxury of the Golden House of Nero on the Esquiline, says that the ceiling of the dining hall was formed of movable ivory squares, which, in turning, allowed flowers and perfumes to fall. And it is reported that Nero on one occasion used up four million sesterces of perfume. Everything was perfumed then: the statues of gods, the doors of palaces, the eagle carried by the cohorts, the cavalry and horses before going into battle; and Juvenal, in one of his satires, noted that it "simply wasn't done" to go into battle without perfumes, cosmetics and looking-glasses. At the funerals of noted personages immense sums were spent on odorous fumigation to render honours to the dead; and Pliny remarks on this folly: "That luxury which follows men even in death, was indeed that which enriched Arabia. . . ."

Some patricians literally coated themselves with unguents; but even that was not without its dangers, for Pliny relates that Lucius Plotius, having been condemned to death, fled to Salerno, where he hid, but on account of the odour which emanated from him he was easily discovered by the soldiers and handed over to justice. Vespasian did not enjoy perfumes. Under Heliogabalus the abuse of perfumes became a delirium. In Rome there was a "Buy Roman" campaign about 90 B.C. P. Licinius Crassus and Lucius Junius Cæsar, the Censors, forbade the use of foreign unguents.

ROMAN PERFUMERY MATERIALS

The oils used were the omfacio pressed from unripe olives, oil from the seeds of grapes gathered during the hot summer season, when the seeds are large, oils of sweet almonds, lentiscus, myrtle and *Pistacia Terebinthus*. The Rhodian unguent was the one in commonest use. At one time it came from Greece, and from Rhodes.

Pliny furnishes precise instructions on the art of making ointments. He records that ointments were



composed of succus (the extracted aromatic principles) and of the base (oil). To these were added resin, myrrh and other analogous substances, to fix the odour in the base. He taught that the ointments improved with age, that light caused alteration, that they should be prepared in leaden vessels, that to judge a perfume it should be smeared on the back of the hand. And to improve ointments made with costus and with myrrh, and to improve the oil, he recommends maceration with evernia, the "mousse de chêne" of later perfumery.

Perfumes prepared in powder form for aspersion were called diaspasmata. From Dioscorides we learn how pastilles were made and used. "Take forty drachms of fresh roses and dry them until free from all moisture, ten of nardo of India, and six of myrrh. Bruise every ingredient together and make the pastilles of the weight of three oboli of oil, and when they are well dried they are placed in an earthenware jar, closing it and making it airtight. There are others who add two drachms of costus, or as a substitute, Illyrian iris, and mix with honey and Chios wine. They are in use by the women, who wear them around their necks in order to subdue the smell of sweat. They are used equally in powder to sprinkle in the bath." The perfumed necklets which have recently reappeared in perfumers' windows are no novelty, having been used by the Etruscans in the first century.

Ovid has many references to cosmetics, and gives a number of rules on personal hygiene and cleanliness and a number of recipes for beauty treatment.

The references which writers of Imperial Rome have made to cosmetics would fill volumes. There was the famous Mask of Poppæia, a mask made of fats, honey and flour (or grated bread), which was applied at night to the face and left on till morning, when it was washed off with asses' milk. Certain cosmetics were not considered efficacious unless they were chewed for a long time; and this curious, though unhygienic, process was carried out by slaves, and from it the French word "fard" is derived, which in etymological origin comes from the common Latin word "farda," which means spittle or phlegm. The hair was tinted black by plant juices. Grey hair was prevented by bear's grease, or by the use of a pomade made from worms. A rouge which was highly favoured came from molluscs which furnished the royal purple. Other rose tints were made from substances termed *Fucus*, which must have been lichens containing a red colouring matter, such as *Roccella tinctoria* and *Patellaria parella*. The nails were coloured with henna.

The rhizotomists or herbalists furnished the whole of the products of the indigenous aromatic flora. Concerning the presentation of the Roman perfumes and cosmetics, it must have been rich in every way, as may be seen in the existent collections, especially of the Royal Roman Museum delle Terme, and of the Royal National Museum, Naples.

MEDIÆVAL TIMES

AFTER the fall of the Roman Empire, and with the advent of barbaric domination, every degree of refinement seemed to vanish. The perfumes were reduced exclusively to their former use, that of rising *per fumum* to the Deity in the Christian liturgical fumigations, or to burn on the altars with the oil in the lamps and with the wax of the torches. There are a number of bright spots, however, and two figures deserve mention: Cassiodoro (468-562), formerly prime minister to Theodore, then to the Queen, Amalasunta, and the King, Vitige, founder of the monastery "Vivarium," near Squillace; Saint Benedict of Norcia (480-543), founder of the Benedictine Order. These in their monasteries kept alive the intellectual life of the period. Of great importance was the founding of the Benedictine Order, for among the studies of the monks were the study of diseases, the preparation of remedies and the care of the sick, hence the study of the potestas herbarum and the *summa medendi*. The work in these monasteries embraced the preparation of various aro-

matics—distilled waters, essences, liqueurs, cosmetics, and there remain to-day in Italy the pharmacy of the Dominicans of Santa Maria Novella of Florence, the pharmacy of S. Maria della Scala of the Carmelites in Rome, the Fatebenefratelli and the Trappists of Rome, the Marists of Carmagnola, the Cistercians of Casamari.

Perfumes and cosmetics came into use again after the Crusade in 1095, organised by Urban II and Peter the Hermit, and developed successively after the other Crusades of 1147 and 1187. The Christian Cavaliers, returning from the Orient, brought back to their ladies plentiful gifts of Asiatic perfumes, and set the fashion again for washing in perfumed water before and after meat. The Eastern drug trade was conducted largely by men like Marco Polo, Marin Sanudo, Balducci Pegolotti, Brother Odorico of Portomaggiore, Geronimo da Santo Stefano and Nicolo de' Conti, and these brought into Italy enormous quantities of raw materials, which for a long time remained the secrets of their discoverers. But with the invention of printing, these passed to the lay readers. The first to teach the manufacture of alcohol in Italy was probably Maestro Taddeo degli Alderotti, a Florentine (1215-1302) and a teacher of medicine at Bologna, who left notice of the operation in a work of uncertain date, but at the time of Alderotti there was a book "*Liber Ignium*" (by a Marcus Gracus, who lived between the twelfth and thirteenth centuries) which dealt with the distillation of wine to extract the aqua ardens, called later aquarzente, and of the use of this in medicine.

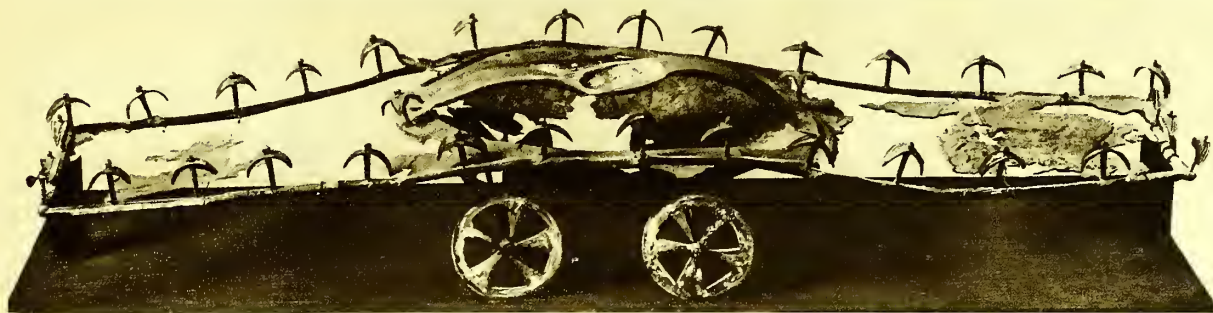
Arnaldo di Villanova (1250-1314) and his pupil, Raimondo Lullo di Majorca (1235-1315), also knew the preparations of many aromatic waters obtained by distillation of the type called Queen of Hungary Water, because it was used by Elisabeth, sister of King Kasimer the Great, and wife of King Charles I of Hungary (1306-1387). The recipe of this water is given in the works of Cabanès.

The art of perfumery in the Middle Ages had a quickening from the arts and crafts guilds which arose in Italy. The greatest was the Florentine Guild of Physicians and Druggists, which embraced also painters, saddlers, gloves, delicatessen vendors, barbers and stationers, founded about 1266, the first statutes of which date from 1314 and are preserved in the archives of the State of Florence.

At a later period the evolution of the plastic and figurative art of the Renaissance completed the Italian perfumery art of the sixteenth century with presentation of incomparable beauty. Water flasks and flagons were richly decorated in gold, and beautiful ceramic ware appeared from Faenza di Savona and elsewhere. It is recorded that Nicola Poussin (1594-1665), a famous French painter, who left Paris to study in Rome, was commissioned by Monsieur de Chanteloup to buy perfumed gloves from a certain Signora Madalena. In Florence, under Cosimo III, another fashion was introduced, that of buccheri, which were perfumed drinking cups used at banquets. This perfumed pottery was utilised for necklets, and broken pieces of it were used for placing among the linen. These were manufactured in Spain and Portugal, having been introduced from the Americas. To the buccheri Lorenzo Bellini (1648-1704) dedicated a poem "*La Bucchereide*."

Professor Commendatore Guido Rovesti is a chemist who for over thirty years has been actively engaged in the manufacture of essential oils and perfumes, as well as the cultivation of medicinal plants. He was largely instrumental in promoting legislation dealing with the production and standardisation of Italian essential oils and aromatic and medicinal plants. Professor Rovesti is General Secretary of the Consultative Commission of the Group of Producers of Aromatic Materials in the National Fascist Federation of Chemical and Allied Industries, as well as chief editor of the "*Rivista Italiana delle Essenze, dei Profumi e delle Piante Officinali*," its official organ, a member of the National Research Council and of various scientific academies.

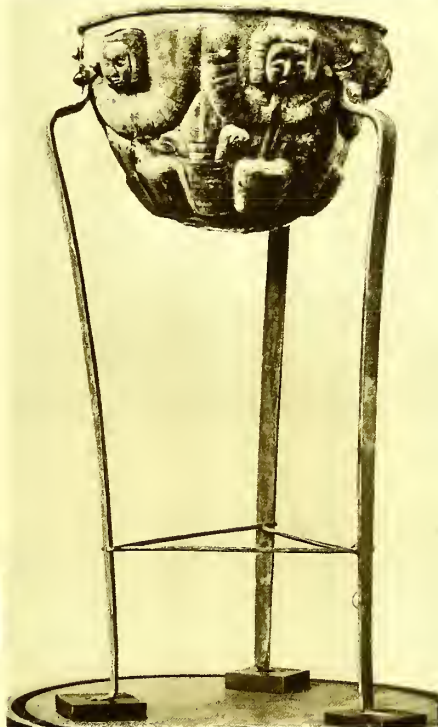
PERFUMERY AND TOILET WARE FROM EARLY ITALY



Censer with wheels from archaic tomb at Praeneste



Left and right, Etruscan metal censers, Centre, casket for cosmetics. From Praeneste, a half-Greek, half-Latin city where many Graeco-Latin and Etruscan reliefs have been found dating from 6th to 4th century B.C.



Left, Corinthian oil flasks (5th cent.) and right, Corinthian and proto-Corinthian perfume jars (6th cent. B.C.)

From Museum of Villa Giulia, Rome. Photos, Alinari



Left, cosmetic jar, Roman art of 5th cent. A.D., symbolizing Christ as Orpheus. From Carrand Collection, Royal Museum, Naples. Right, an Etruscan container of a red earth called bucchero, from Gregorian Etruscan Museum, in the Vatican. Contrast the heavy style with the lightness of grace due to Greek influence in the objects seen in the previous page



Etruscan toilet casket of 4th cent. B.C. in bronze with reliefs of battles of Amazons. The conception is similar to that of the many Etruscan funerary urns and sarcophagi of the 6th and 5th centuries B.C. Right, Etruscan ornaments in gold for holding perfumed pastilles. Both from Gregorian Etruscan Museum, the Vatican

Photos, Alinari



Trade Report

Where possible scales of prices of chemicals are given for bulk down to small quantities. Prices recorded for crude drugs, essential and fixed oils and coal tar products are for fair sized wholesale quantities. Qualities of chemicals, drugs, essential and fixed oils, etc., vary, and selected brands or grades would be at higher values

28 Essex Street, W.C.2, June 22

THE rather better general tone reported last week is being maintained and most markets are keeping quite steady. It is noticeable that almost immediately there is a revival of demand for a product spot supplies are shown to be short. This may not apply to all products, but there is no doubt that stocks of the majority of lines are far below normal. The fall in exchange rates of the £ has stiffened a number of markets. In pharmaceutical chemicals, business has moved along quietly. Continental caffeine shows a sharp recovery. Hexamine prices have been put on a gold basis. Business in crude drugs has been patchy and mostly rather quiet. Japanese camphor and menthol remain dull. Honey is steady but quiet in the off-season. Ipecacuanha is weak. Peppers are firm, and rubber shows a slight recovery and is steadier, with a further fall in stocks. Essential oils have experienced another week of fairly satisfactory business, but there is keen competition in some lines. The market is awaiting news on the question of liability to duty of a number of important products; the seasonal business in these lines is being spoilt by the delay and uncertainty. Caraway is cheaper on spot. Cassia is easier. Cayenne bois de rose is scarce and firm on spot. Sicilian hand-pressed lemon is almost any price according to brand. Palmarosa is firm. Japanese peppermint is nominal on spot and steady forward. Spearmint is a point easier, and wormseed substantially cheaper.

Exchange Rates on London

THE following is a list of the chief Continental and other exchange rates at the opening on Wednesday morning:—

Centre	Quoted	Par	June 22	Value of the £
Amsterdam ..	Fl. to £	12.107	8.95½	14/9½
Berlin ..	Mks. to £	20.43	15½	14/11
Brussels ..	Belga to £	35	26½	14/10½
Copenhagen ..	Kr. to £	18.159	18½	20/2
Lisbon ..	Esc. to £	110	110	20/-
Madrid ..	Ptas. to £	25.22½	43½	35/0½
Milan ..	Lire to £	92.46	70½	15/1½
Montreal ..	Dol. to £	4.86½	4.19	17/2½
New York ..	Dol. to £	4.86½	3.61½	14/10½
Oslo ..	Kr. to £	18.159	20½	22/4½
Paris ..	Fr. to £	124.21	92½	14/9½
Prague ..	Kr. to £	164.25	122½	15/8½
Stockholm ..	Kr. to £	18.159	19½	21/5½
Warsaw ..	Zloty to £	43.38	32½	14/11½
Zurich ..	Fr. to £	25.2215	18½	14/9

Bank rate 2½ per cent.

Pharmaceutical Chemicals, etc.

A STEADY flow of rather small sized business continues to be done in this market, and prices are showing little alteration beyond that accounted for by fluctuations in rates of exchange. Hexamine prices have been put on a gold basis. Resorcin has been in good demand. Continental caffeine shows a sharp recovery.

ASPIRIN continues very steady, with business on a good scale; makers' and dealers' prices are competitive; home trade, ten cwt., 2s. 7d.; five cwt., 2s. 8d.; one cwt., 2s. 8½d.; 28 lb., 2s. 9d.; 14 lb., 2s. 10d.; 7 lb., 3s.; 1 lb., 3s. 4d. per lb. Export to Colonies and British Possessions: ten cwt., 2s. 7d.; five cwt., 2s. 8d.; one cwt., 2s. 8½d. per lb., f.o.b.; less than one cwt., 2s. 9d. per lb., ex works.

BARBITONE remains dull and spot prices are irregular: spot, two cwt., 10s. 6d.; one cwt., 10s. 8d.; 56 lb., 10s. 10d.; smaller parcels, up to 11s. 3d. per lb.

BROMIDES.—This market shows no change, with makers' and dealers' prices competitive: ammonium, not less than five cwt., 1s. 8d.; one cwt., 1s. 9d.; smaller quantities, 2s. per lb.; potassium, B.P. crystals and granular, not less than five cwt., 1s. 5d.; one cwt., 1s. 6d.; smaller quantities, 1s. 9d. per lb.; sodium, B.P., not less than five cwt., 1s. 7d.;

one cwt., 1s. 8d.; smaller quantities, 1s. 11d. per lb. Special prices for bulk quantities.

CAFFEINE.—There is a tendency for this market to recover sharply, and most of the main sources of recent cheap offers of Continental material are now asking 5s. 10½d. to 6s. per lb. for cwt. lots of pure. Citrate values are moving up accordingly.

CALCIUM LACTATE is in moderate demand; market competitive: spot, one cwt., 1s. 2d.; 56 lb., 1s. 2½d.; 28 lb., 1s. 3d. per lb.

CHLORAL HYDRATE.—Makers' prices are unchanged: duty-paid crystals, in 14-lb. containers, ten cwt., 3s.; five cwt., 3s. 0½d.; one cwt., 3s. 1½d.; 56 lb., 3s. 2½d.; 28 lb., 3s. 3d. per lb., and in 28-lb. jars one penny per lb. extra.

CITRIC ACID (B.P. CRYSTALS).—Makers' prices are quoted at the reduction recorded last week at 1s. 0½d. per lb., less 5 per cent., nominal and without engagement. Dealers are quoting at competitive prices.

CREAM OF TARTAR.—Makers' quoted price is at last week's reduced figure of 98s. per cwt., less 2½ per cent., nominal and without engagement, for 99 to 100 per cent. material.

HEXAMINE.—Prices for this market have been fixed, and are based on gold standard par rate of exchange: five cwt., 1s. 8d.; two cwt., 1s. 8½d.; smaller parcels, up to 2s. per lb. On current rates of exchange the two cwt. price would work out at about 2s. 3¾d. per lb.

IODIDES.—Makers' prices continue at the revised scale recorded last week.

METHYL SALICYLATE (B.P.).—Home makers' and dealers' prices are steady at level rates; business is fairly good: one ton and over, 1s. 4½d.; ten cwt., 1s. 5d.; five cwt., 1s. 5½d.; one cwt., 1s. 6d.; less than one cwt., 1s. 6½d.; small quantities in bottles, up to 2s. per lb.

METHYL SULPHONAL.—Market is well maintained and dealers are doing a limited business: two cwt., 18s.; one cwt., 18s. 6d.; 56 lb., 19s. 1d.; small parcels, 19s. 9d. per lb.

MILK SUGAR.—Dealers' prices for Continental material continue at keen figures: one ton, 51s. 6d.; ten cwt., 52s. 6d.; two cwt., 53s. 6d., per cwt., in two-cwt. cases.

PHENACETIN is fairly steady with occasional cheaper offers; business limited: crystals, ten cwt., 5s. 1d.; five cwt., 5s. 2d.; two cwt., 5s. 4d.; and less, 6s. per lb., with powder 2d. per lb. extra.

PHENAZONE is being offered on spot at very keen prices; business slow: crystals, ten cwt., 9s.; five cwt., 9s. 2d.; two cwt., 9s. 4d.; and less, 9s. 9d. per lb., with powder 2d. per lb. extra.

QUININE SULPHATE.—The Convention price is maintained at 2s. 3d. per oz., carriage paid on bulk quantities.

RESORCIN.—The market is steady and business has been better. Crystals, one cwt., 4s. 6d.; 56 lb., 4s. 7d.; 28 lb., 4s. 8d.; 14 lb., 4s. 10d.; 7 lb., 5s.; less than 7 lb., 5s. 6d. per lb., with powder 3d. per lb. extra.

SALICYLIC ACID (B.P.).—Makers' prices are fully steady and business is moving: one ton, 1s. 5d.; ten cwt., 1s. 5½d.; five cwt., 1s. 6d.; one cwt., 1s. 6½d.; small parcels, up to 2s. per lb.

SALOL.—Dealers' prices are unchanged: crystals, two cwt., 5s. 2½d.; one cwt., 5s. 4½d.; 56 lb., 5s. 6d.; smaller parcels, 5s. 7½d. per lb.; powder, 2d. per lb. extra.

SODIUM SALICYLATE (B.P.).—Makers' and dealers' prices are steady and business is fairly satisfactory: home trade, powder, two tons, 1s. 10d.; one ton, 1s. 10½d.; ten cwt., 1s. 11d.; five cwt., 1s. 11½d.; one cwt., 2s.; 28 lb., 2s. 1d.; 14 lb., 2s. 3d.; 7 lb., 2s. 4d. per lb., with crystals 1d. per lb. extra.

SULPHONAL.—Dealers' prices for spot supplies are firm: crystals, two cwt., 14s. 6d.; one cwt., 15s.; 56 lb., 15s. 3d.; small lots, up to 16s. per lb., with powder 2d. per lb. extra.

TARTARIC ACID (B.P. CRYSTALS).—Home makers are quoting at 1s. 0½d. per lb., less 5 per cent., nominal and without engagement; dealers are offering at competitive prices.



Crude Drugs, etc.

AGAR-AGAR.—Market is dull and unsteady. Spot, Kobe No. 1, 3s. 3d.; No. 2, 3s.; Yokohama No. 1, 3s. per lb. Shipment, Kobe No. 1, 2s. 2½d.; No. 2, 2s.; Yokohama No. 1, 2s. per lb. c.i.f.

BALSAMS.—*Tolu* is steadier at the slightly lower figures of 3s. 3d. to 3s. 4d. per lb. as to quantity.

BUOHU.—The spot market is very steady at previous rates; business moving on limited lines. A rather marked shortage of good green leaves.

CAMPHOR.—Spot is dull and shipment a point easier. Spot, slabs, 2s. 5d.; tablets, 3s. 1d. per lb.; shipment, slabs, 1s. 10½d.; flowers, 1s. 10½d.; tablets, 2s. 3½d. per lb. c.i.f.

CASCARA SAGRADA.—The shipment market is easier, with 1932 peel quoted at 37s. 6d. to 38s. per cwt. c.i.f. for bulk quantities, duty for buyer's account. Spot is unchanged in the region of 52s. 6d. per cwt.

CLOVES.—The market is steadier, but business remains slow. Zanzibar, spot, 7½d.; shipment, July, 6½d.; August-October, 6½d. per lb. c.i.f. Madagascar, spot, 7½d. per lb.

The landings of Zanzibar in London during the week ended June 18 were *nil* and the deliveries 27, leaving a stock of 2,030, against 597 in 1931. From January 1 to date landings of Zanzibar have been 4,350, against 871 in 1931, and the deliveries 4,308, against 1,293 in 1931. Landings of Madagascar for the week ended June 18 were *nil* and the deliveries three, leaving a stock of 1,596, against 1,412 in 1931. Landings of Madagascar this year to date have been 782, against 2,085 in 1931, and the deliveries 188, against 1,579 in 1931.

COD-LIVER OIL.—The market is dull in the off-season, with finest Lofoten steam-refined, non-freezing medicinal oil for shipment at 82s. per barrel, c.i.f. Spot, about 100s. per barrel, with some brands cheaper.

GINGER.—The market has been dull and spot is a point easier. West African, spot, 22s. 6d. per cwt.; for arrival, sellers, 20s. per cwt. c.i.f.

GUM ACACIA.—The market is steady and shippers have advanced their quotations a further sixpence per cwt. Business is slow.

HENNA LEAVES.—Supplies are plentiful: quoted from 25s. to 32s. 6d., as to colour.

HONEY.—The market has been quiet: spot, Jamaica, pale to white, 42s. 6d. to 44s.; medium, 36s. to 37s. 6d.; manufacturing qualities, 26s. to 27s. per cwt.

INSECT FLOWERS.—Spot supplies of closed Dalmatian are valued at 100s. per cwt., and half-closed at 95s. per cwt.

IPECACUANHA.—This market is of little interest and prices quoted are easy in the region of 5s. per lb., and less for a good line. Minas, spot, about 4s. 2d. per lb.

LIQUORICE ROOT.—Natural root is offered on spot at 19s., and single peeled at 40s. per cwt.

MALE FERN EXTRACT.—Spot is easier in the region of 4s. 7d. per lb.

MENTHOL.—Business has been limited; market about unchanged: spot, K/S brands, 13s. 4½d., and less for bulk quantities. Shipment, June-July and August-September, 10s. 6d.; October-December, 10s. 4½d. per lb., c.i.f.

MERCURY.—Spanish-Italian is quoted for shipment at \$50 per bottle, f.o.b. Continental port: spot prices are again easier in the region of £12 per bottle, ex warehouse.

PEPPER.—At the advances recorded the market closes firm and business has been better. Lampong, spot, 6½d.; shipment, May-July, 5½d.; August-October, 5d. buyers, c.i.f.; Tellicherry, spot, 7½d.; Aleppy, spot, 7d. per lb. White Muntok, spot, 6½d.; shipment, June-July, 6½d.; June-August, 6½d.; August-October, 6½d. per lb., c.i.f.

RUBBER.—With a further substantial fall in stocks during the past week prices have improved a little, and the market is steadier. U.K. stocks total 111,237 tons, as against 114,187 tons for the previous week, and 137,341 tons a year ago. Standard ribbed smoked sheet: sellers, spot, 1½d.; June, 1½d.; July, 1½d.; July-September, 1½d.; October-December, 1½d.; January-March, 1933, 2d.; April-June, 2½d. per lb.

SARSAPARILLA.—Grey Jamaica, if available on spot, is firm at 2s. 4d. per lb. There is also a shortage of good colour native.

SEEDS.—Celery, 120s. per cwt.; fennel, 32s. 6d. per cwt.; parsley, 25s. per cwt.; anise, Spanish, 45s. per cwt.; Levant, 37s. 6d. per cwt.; Cape quince, 5s. 3d. per lb.

SQUILL.—Some good white on spot is quoted at 25s.

Essential Oils, etc.

A FAIRLY good business is being done in a number of products in this market, and the tone keeps about steady. Business in lemon, peppermint, etc., is being held up pending a decision on liability to duty. Palmarosa is firm. Cassia is easier and wormseed is much cheaper. Cayenne bois de rose is short on spot.

BERGAMOT.—The Consortium spot quotation continues at 10s. 6d. to 11s. per lb. as to quantity. Outside offers are very competitive.

BOIS DE ROSE.—Cayenne on spot is scarce and held for 8s. 6d. per lb. Brazilian is still available on spot at 3s. 6d. No shipment offers being made, and the official control that is stated to have been set up is reported to be proposing to limit the crop to 80 tons per annum, but in some quarters this is not confirmed.

CARAWAY.—Spot holders are offering Continental twice rectified at about 8s. to 8s. 4d. per lb. for fair quantities.

CASSIA is rather cheaper on spot at about 3s. 9d. to 3s. 11d. per lb., and shipment is quoted at 3s. 3d. per lb.

CITRONELLA.—The spot market for Java is being considerably impeded by the lack of definite information on the question of duty, and the price at the moment is nominal. Shipment is about 2s. 4d. per lb. c.i.f. Ceylon is none too steady, with spot about 1s. 6½d. and shipment in the region of 1s. 4½d. per lb., c.i.f., for quantities.

CLOVE.—English 90 to 92 per cent. is quoted in the region of 4s. 6d. per lb. for cwt. lots. Madagascar, spot, 3s. 9d. to 4s., and shipment is easier at 2s. 8½d. per lb. c.i.f.

LEMON.—Some business is being done, but generally orders are being held over pending settlement of liability to duty. The delay is doing serious harm at the height of the season. Sicilian, hand-pressed, 4s. to 5s. per lb. spot; shipment, 3s. 9d. to 5s. per lb., c.i.f., as to brand and quality. Californian, spot, 62 cents per lb., in drums.

ORANGE.—Business has been fair on rather small lines. Sicilian sweet, spot, about 7s. 6d.; shipment, 6s. 4d. to 6s. 6d. per lb. c.i.f. French Colonial, 5s. 9d. per lb. c.i.f. West Indian, hand-pressed, 5s. 6d. per lb. c.i.f. Californian, spot, 82 to 92 cents per lb.

PALMAROSA.—Spot supplies are firmly held at the quoted figures of 8s. 6d. to 8s. 9d. per lb., and there is not very much offering.

PEPPERMINT.—The tone is steadier and there has been good Continental inquiry for goods afloat. Spot is nominal at about 4s. per lb. Shipment, June-July, 3s. 4d.; August-September and October-December, 3s. 3d. per lb. c.i.f. American oil is quoted from one dollar 30 cents per lb. c.i.f.

PETITGRAIN.—A fair business has been done, with spot at 4s. 2½d. to 4s. 4d. per lb. as to quantity.

SPEARMINT is rather cheaper on spot, with sellers of fair quantities at about 7s. 6d. per lb.

WORMSEED.—The spot value shows a sharp decline, being mentioned at about 9s. 6d. per lb.; market remains dull.

Trade-Mark Applications

The figures in parentheses refer to the classes in which the marks are grouped. A list of classes and particulars as to registration are given in "The Chemist and Druggist Diary," 1932, p. 339.

(From "The Trade Marks Journal," June 15, 1932.)

"**PYNADOR**"; for toilet paper (3). By H. Gadson & Sons, Ltd., 47-49, Crispin Street, Bishopsgate, London, E.1. 532,002.

"**KIWI**"; for food substances (excluding frozen lamb, etc.) (42). Design of hook; for food substances (42). By Hooker's Malted Milk Co., Ltd., 9 King's Bench Walk, London, E.C.4. 531,693/694.

"**ASTROPINE**"; for toilet articles (43). By L. G. Stone, 110 Cannon Street, London, E.C.4. 530,418.

"**JESMONIA**"; for perfumery, etc. (48). By The Florence Rutter Co., Ltd., 118 Baker Street, London, W.1. 530,618.

"**UMPAR**"; for perfumery, etc. (48). By D. Thom & Co., Ltd., Whit Lane, Pendleton, Salford. 531,763. (Associated.)



Correspondence

Letters should be written on one side of the paper only. Correspondents may adopt an assumed name, but must in all cases furnish their real name and address to the Editor.

Testimonial to Mr. Herbert Skinner

SIR,—May I ask your kindness to publish the following reply to the many applications received about the allotment of tickets for the Herbert Skinner jubilee presentation dinner to be held at the Criterion Restaurant, Piccadilly, on Thursday, October 6? Towards the end of August, it is the committee's intention to remind subscribers again. Those applicants who have paid money for tickets will receive them during the next fortnight. The accommodation is limited to about 220 seats, and according to the magnificent response to date, might I ask those who wish to be present to use their reply envelopes as soon as possible, if only for the purpose of asking to be reminded again at the later date?

Yours faithfully,

G. F. WEISS, Hon. Secretary,

180 Philip Lane, Tottenham, London, N.15.

A Troublesome Throat Paint

SIR,—The difficulties encountered with the formula in the *C. & D.* of June 4 (p. 634) have cropped up from time to time, and I thought your readers might be interested in my own experience.

Iodine	...	...	...	...	gr.v.
Acetic ether	...	...	...	...	3iij.
Glycerin	...	...	...	to	3j.

I first saw this formula in "The British Medical Journal" (17/9/27), when Sir James Dundas Grant, the eminent rhinologist, referred to this "penetrating local application of iodine" found by him to be "very efficacious, even to the extent of doing him out of an expected tonsillectomy." He then went on to describe how he carried out tests after the removal of the tonsils to prove that the iodine in this pigment does so penetrate. About this period, one of the most eminent throat specialists in the Midlands prescribed this paint for myself, and informed me that at the time not one in ten pharmacists dispensed it to his satisfaction. Some regarded the acetic ether merely as a vehicle in which to dissolve the iodine, prior to the latter entering into solution with the glycerin; again, some went so far as subsequently to remove the acetic ether by evaporation, obtaining a product of little more use than, say, Mandl's pigment. It was made clear to me that the acetic ether is an important constituent of this preparation. I therefore proceeded on the following lines:—

The iodine was rubbed down with the acetic ether in a mortar (glass for preference) until completely dissolved. Then I added the glycerin very gradually, and with constant and vigorous stirring thoroughly incorporated one lot of glycerin before adding more. At first the mixture behaves like the primary stage of an emulsion. When all the glycerin has been incorporated it will be cloudy, due to the occlusion of air; but after standing some time, these air bubbles disperse, and it eventually becomes perfectly clear without the separation of any iodine. If the paint is so made, the bottle does not even require a "Shake" label.

Heat is both unnecessary and undesirable, and should not be used. On standing, the finished product should be as clear as, for example, freshly made glycerin. acid. tannic., B.P. A good preparation can be made by adding the ethereal solution of iodine to the glycerin (instead of vice versa). With this method, however, the iodine sometimes shows a tendency to "throw out" round the neck of the bottle, though it eventually goes into solution again. The whole point is to mix gradually from the start, and if time permits, allow the air bubbles to disappear before sending out. If one has a demand for this pigment it might be advisable to keep a few ounces in a stoppered wide-mouthed bottle ready for use. I know that innumerable dispensers have ex-

perienced trouble, while some have not even attempted to use a mortar, merely adding the glycerin to the dissolved iodine and putting a "Shake" label on the bottle. The result, of course, is not a homogeneous pigment at all, and cannot be satisfactorily brushed into the tonsils. The use of such a preparation is not without risk to the patient, as it may cause choking if the supernatant liquid, consisting mainly of iodine in acetic ether, is applied to the back of the throat. It is usual to use a special brush for this purpose—one made by cutting down the camel hairs of an ordinary throat brush in order to give more rigidity.—Yours, etc.,

A. N. SMITH.

Nottingham.

A Call to Youth

SIR,—I have been very much interested in the letters on the above subject. Being "youthful," my acquaintance with pharmacy is not sufficiently long to know whether or not it has been heard before. The last letter by "Unofficial" sums the position up fairly. I propounded a similar theory, and received the reply that a way can be found by youth with initiative, etc. As a branch secretary, I very much regret that it is thought in some quarters that the branches have not produced the "goods." Such a suggestion I strongly question. To return to the real issue, it would be helpful to have a definite idea as to what is meant by "youth." Another point which must arise is that the view of youth, which is to respond and do good, must necessarily be somewhat revolutionary, and (youthfully) emphatically stated. The present members of Council would immediately close their ranks, and send out a S.O.S. to stick to the crew that is pulling you through, or other similar joint propaganda. Again, what of tradition? Is it not, and has it not been, the custom throughout the ages to consult the elders of the tribe or some old sage? Another point preventing the election of youth is the method adopted in conducting elections (of one body, at any rate). An unknown youth, not a J.P., C.C., or past-president L.A., etc., would stand no chance of being elected under the present system of mass voting, unless the retiring councillors took him under their wings, in which case it would have to be someone who would "toe the line." Finally, this "chicken" will be pleased to stand at the next election provided that some benevolent chemist will give him a guaranteed job, and allow him as much time off for meetings as is requisite, whilst allowing him complete freedom in expressing and holding his own opinion. Pharmacy already owes his present employer a debt of gratitude for the amount of his time this "chicken" uses in attending to (branch) pharmaceutical affairs, and in fairness to the business could not ask him to make the greater sacrifice (*vide supra*). It would necessitate at least an extra assistant.

Yours faithfully,

FARMER SIST'S COCK CHICKEN (20/6).

Competition

SIR,—It is gratifying to me to read the difference of opinion expressed by "Southerner." Dogmatism is useless when discussing a case such as described by "Puzzled," so I suggest we concede that both "Southerner" and myself have expressed views suitable for our own businesses. Perhaps it is not generally realised that, even in times of depression, rushes are very common in industrial districts. If one's staff is inadequate to cope with a rush, then I find customers walk out and a competitor with a temporary lull gets the benefit. A critic might say, "You should hold by personality"; but the public is fickle, and a small number of customers are rolling stones. A small number constantly repeated mounts up in the course of a

year; and I contend it is worth while giving them good service, hoping by so doing to convert them into regular customers and that they will recommend your service to others. With reference to the cost of keeping assistants, I know sentiment should not enter into business, but fairness should. During the boom years proprietors did not pay assistants more than the average salary because times were good, but assistants probably had to work very hard to cope with epidemics. Now times are bad we must consider our own pockets first and foremost. Most chemists make a surplus profit over and above their living expenses, and this amount might be exhausted before assistants are turned away. If "Southerner" is correct that a single-handed man can do £30 a week himself, then I am considerably over-staffed. The fact remains my profit is certainly above the average and my life is comfortable. This looks as if it does pay to keep a reliable and efficient staff and to pay them above the average salary. Here again it all depends on how much dispensing is done and how much real pharmacy work is done on the premises. Advertising is the next difference of opinion. I have done this consistently for twenty years, and have always found it to pay until six months ago; then my advertisements ceased to pay for their cost. I have advertised seasonable lines according to the changes of weather in the same way as hitherto, but with the spending power being less results have been disappointing. I believe in advertising, but there is a right time and a wrong time, notwithstanding what the experts who have their living to get at it tell you. When times improve I shall spend in advertising the money I am now saving over and above the amount I allot for each year.—Yours faithfully,

MIDLAND OPTICIST (20/6).

Legal Queries

R. W. (7/4).—The references to "chilblains" and "cutaneous eruptions" render the article liable to medicine-stamp duty.

C. K. (10/6).—Since metallic mercury is not a scheduled poison there are, consequently, no restrictions on the sale of mercury ointment B.P. and mercurial ointment B.P.C.

R. E. W. (17/5).—Jersey and Guernsey each possess their own laws regulating the practice of pharmacy and the sale of poisons. In Jersey the certificate of Pharmaceutical Chemist or Chemist and Druggist of the Pharmaceutical Society of Great Britain, and of Pharmaceutical Chemist of the Pharmaceutical Society of Ireland, as well as the French diploma of Pharmacien, is accepted for registration, and enables the holder to carry on the business of a pharmacist in the island. In Guernsey the certificate of Pharmaceutical Chemist or Chemist and Druggist of the Pharmaceutical Society of Great Britain is accepted. In both islands permission to carry on a pharmacy must first be obtained from the Cour Royale, and the application has to be addressed to the Greffier du Roi, Cour Royale, Jersey or Guernsey, as the case may be.

J. D. R. (24/5).—You could not safely sell Wincarnis with quinine without a licence. The legal position is this: there is no exemption in law from the requirement of a licence, both an excise and a justices' licence, for the sale of wine, even though the wine is genuinely medicated. So far as the excise licence is concerned, the Board of Customs and Excise do not insist upon a licence being held if the wine is, in their opinion, medicated and the dosage, as set out on the label, shows that the wine is not intended for use as a beverage. As regards the justices' licence, this is required in the case of a sale of any article recognised as wine, even though medicated. A chemist was fined for selling Wincarnis with quinine wine without having a justices' retail wine licence a few years ago, and the High Court held that he was properly convicted.

Miscellaneous Inquiries

When samples are sent particulars should be supplied to us as to their origin, what they are, what they are used for, and how. We do not undertake to analyse and report upon proprietary articles nor to publish supposed formulas for them.

W. S. (29/46).—DRY SHAMPOO.—Possibly one of the following formulas will meet your requirements:—

I		II	
Ol. coco nucis	.. 10 dr.	Tr. quillaia	..
Potassii hydroxidi	.. 1 dr.	Alcohol ammonia aa.	M 30
Sodii hydroxidi	.. 1 dr.	Aquam	.. ad 1 fl. oz
Aq. dest.	.. ad 6 fl. oz.	This produces an abundant froth but no lather.	

The addition of alcohol is to be deprecated, since it delays the production of a lather.

G. & O. (2/68).—DISPENSING CHARGE.—The method of pricing the prescription according to the C. & D. Retail Price List is:—

	d.
Tinct. nuc. vom.	.. .. 3iv. 3.5
Tinct. zingiberis	.. .. 3j. 9.0
Syrup. aurant.	.. .. 3iv. 19.0
Aq. menth. pip.	.. .. ad 3x. 6.5
Container	.. .. 3.0
Fee	.. .. 8.0

Charge, 4s. 1d. 49.0

J. M. J. (10/68).—GLAZING SOLUTIONS.—The following are the formulas for photographic glazing solutions in general use:—

I		II	
Beeswax	.. .. 20 gr.	Spermaceti or white wax	.. .. 20 gr.
Turpentine	.. .. 1 oz.	Benzol	.. .. 1 oz.

A few drops to be rubbed on the glass or ferrotype which is then polished with a soft cloth.

III	
Prepared ox gall	.. .. 1 oz.
Water	.. .. 4 to 8 pints

Soak the prints in the solution for a minute or two and squeegee without intermediate washing.

The last-mentioned is generally considered the most efficient and is best purchased ready made.

T. M. (13/68).—FLY SPRAYS.—The following are formulas for fly sprays of the type you require:—

I		II	
Pyrethrum	.. .. 400	Insect powder	.. 8 oz.
Camphor	.. .. 50	Paraffin	.. .. 1 gall.
Cedar wood oil	.. 150	Methyl salicylate,	
Citronella oil	.. 25	eucalyptus oil or	
Lavender oil	.. 25	safrol	.. .. 1 oz.
Spirit	.. to 2,000	Macerate the pyrethrum for 48 hours, strain, and add the other ingredients.	

Extract the pyrethrum with the alcohol, strain and add the other ingredients.

Retrospect of Fifty Years Ago

Reprinted from

"The Chemist and Druggist," June 15, 1882

An International Pharmacopœia

The prospects of the International Pharmacopœia are not hopeful. The Commission appointed to prepare a scheme to be submitted to the International Congress at Brussels in 1884 are working with more or less earnestness at the task they accepted. Some countries have not yet appointed delegates at all, and probably never will. . . . There are and will be various opinions as to the desirable extent of the work. The general sense of the London Congress [of 1881] was no doubt that the so-called International Pharmacopœia should be limited to "a compilation in which the strength of all potent drugs and their preparations is equalised."

A recent "SANDOZ" product of particular interest to Pharmacists

PANTHESINE Brand BALM

is a new departure in endermic medication.

IT CONTAINS 5% of Panthesine (n-diethyl-leucinol-ester of p.amido-benzoic acid) in a special *vegetable* emollient base.

IT DOES NOT CONTAIN menthol, oil of wintergreen, or any other irritant substance.

It has been found to be of great value in relieving pain, reducing inflammation, and calming irritation,

and for the treatment of

Acute and Chronic Nasal Catarrh

PANTHESINE BRAND BALM IS NOW IN DEMAND

Send for a free specimen tube and particulars of bonus quantities to:

"SANDOZ," 5, Wigmore St., London, W.1

WHOLESALE DISTRIBUTORS:

BROOKS & Warburton, Ltd., 232-240, Vauxhall Bridge Road, London, S.W.1

Telephone: VICTORIA 9652.

Telegrams: AMEDRUSTO, CHURTON, LONDON.

AND FROM:

SCOTLAND.

T. & H. SMITH, Ltd.,

Blandfield Chemical Works, Wheatfield Road,
EDINBURGH.

Telephone: EDINBURGH 61043/6.

Telegrams: MECONIC, EDINBURGH.

AND

T. & H. SMITH, Ltd.,

32 & 34, Virginia Street, GLASGOW.

Telephone: 140 BELL.

Telegrams: MECONIC, GLASGOW.

IRISH FREE STATE.

MAY, ROBERTS & Co., Ltd.,

Grand Canal Quay, DUBLIN.

Telephone: DUBLIN 62345.

Telegrams: FEEDERS, DUBLIN.

NORTHERN IRELAND.

THOMAS McMULLAN & Co., Ltd.,

Victoria Street, BELFAST.

Telephone: BELFAST 4214.

Telegrams: EMERALD, BELFAST.

EVANS, GADD & CO., LTD.

Wholesale & Manufacturing Chemists

BRISTOL and EXETER.

Telephone : Bristol 20358, 20359.
" Exeter 2278, 2279.

Telegrams : Gadd, Bristol.
" Gadd, Exeter.

LARGE STOCKS.

DRUGS,
GALENICALS,
PATENT
MEDICINES,

QUICK DESPATCH.

*PROPRIETARY ARTICLES, SURGICAL DRESSINGS,
VETERINARY MEDICINES, ETC.*

SOUTH AFRICA

is steadily becoming a manufacturing country. The high tariff, just increased, fosters local industries and stresses the necessity for overseas Houses with important South African trade to explore the probable advantage of local manufacture. We already produce in South Africa for British and American proprietors many important Medicines and Toilet articles and have ample facilities at our Port Elizabeth Factory for more work. We can also distribute with maximum efficiency.

LENNON LIMITED

Head Office, CAPE TOWN
Branches throughout South Africa.

London Office,
12/14 Lafone St., London, S.E.1

HOPKIN & WILLIAMS

LTD.

16 & 17 Cross Street,
Hatton Garden, E.C.1

"ANALYTICAL REAGENTS STANDARDS AND TESTS"

THIS WELL-KNOWN BOOK HAS BEEN COMPLETELY RE-WRITTEN AND BROUGHT UP TO DATE BY THE INCLUSION OF SUBSTANCES EMPLOYED IN MODERN ANALYTICAL PRACTICE.

Post free 2s. 6d.

A. & M. ZIMMERMANN
Petri Bros. Ltd. Proprietors

CHEMICALS
Pharmaceutical
Technical
Liquorice
Block
Juice

CHEMICALS
ESSENTIAL OILS

COD
LIVER OIL
Medicinal
and Cattle
Marseilles Soap

**3 LLOYDS AVENUE
LONDON. E.C.3**

EMULSIONS • DECOCTIONS • INFUSIONS OINTMENTS • SYRUPS • LIQUID EXTRACTS TINCTURES • LINIMENTS

LYSOL-JOHNSONS

The Guaranteed Lysol. 50 per cent. Cresols.
High Rideal Walker Coefficient. Completely
soluble in water.



Ask for
particulars of
our Lysol
Bonus Scheme
58% to 65%
profit.

Copy of
our No.3 Drug
Price List sent
regularly on
request.

JOHNSON & SONS

MANUFACTURING CHEMISTS LTD.

HENDON, LONDON, N.W.4

Manchester Office : 12 Queen Street, Deansgate

To Wholesale Buyers

We offer the following articles in bulk at very
special prices, the quality is the finest that can be
produced and is fully guaranteed in every way.

SAMPLES AND QUOTATION ON RECEIPT OF
ENQUIRY STATING QUANTITY REQUIRED.

BAY RUM
COCOANUT OIL SHAMPOO
COMPOSITION ESSENCE
LAXATIVE FRUIT ELIXIR
RASPBERRY VINEGAR
VANILLA ESSENCE

J. C. ARNFIELD & SONS, LTD.

Telegrams :
"CHEMICALS,
STOCKPORT."

Manufacturing Chemists **STOCKPORT** Established 1786

Telephone :
4601 (2 lines).
Pte. Br. Exch.

WE SPECIALIZE IN
THE MANUFACTURE OF

GALLIC ACID • PYROGALLIC ACID

PURE & TECHNICAL

RESUBLIMED, PURE CRYSTAL & TECHNICAL

WHOLESALE & EXPORT ONLY. Enquiries Invited.

J. L. ROSE, LIMITED, ABBEY ROAD, BARKING, ESSEX.

TELEPHONE: GRANGEWOOD 0076.

TELEGRAMS: "GALLIC, BARKING."

**CHLOROFORM**

(DUNCAN)

CHLOROFORM—PURE.CHLOROFORM—METHYLATEDCHLOROFORM—BLUE LABEL

*All these varieties answer
the tests of the British
Pharmacopæia*

ETHER

(DUNCAN)

ANÆSTHETIC ETHER S.G. 720ETHER PURIFICAT S.G. 720ETHER B.P. S.G. 735

*These Ethers are pure, stable, and
free from decomposition
products*

**ETHYL
CHLORIDE**

(DUNCAN)

**ETHYL
BROMIDE**

(DUNCAN)

Literature and Prices
may be had on application

DUNCAN, FLOCKHART & Co.

EDINBURGH & LONDON (155 Farringdon Road, E.C.1).



PHARMACEUTICAL PREPARATIONS

(DUNCAN)

Tinctures, Concentrated Infusions,
Ointments, Pills, Capsules, Tablets,
Hypodermic Injections, etc.

ORGANO-THERAPEUTICAL PREPARATIONS

(DUNCAN)

Thyroid, Ovarian, Thymus, Pituitary,
Orchitic, Prostate, Cerebral Substance,
Suprarenal, &c.

Baumol Toilet Preparations

Toilet Soap, Vanishing, Cold
and Skin Creams, Tooth Paste,
Powder, etc.

Vaccines and Tuberculins

Prepared by the Laboratory
of the Royal College of
Physicians, Edinburgh.

Literature and Prices
may be had on application

DUNCAN, FLOCKHART & Co.

EDINBURGH & LONDON (155 Farringdon Road, E.C.1)

PLAIMAR

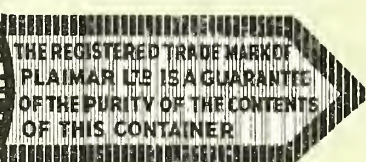
SANDALWOOD OIL

Official in the French Codex
DISTILLED BY PLAIMAR LTD., PERTH, W.A.

European Agents **MAXWELL, PLAISTOWE & Co. Limited**
 22a College Hill, Cannon Street, London, E.C.4

Telephone: Central 5859.
 Telegrams and Cables: Azucena, London.
 Codes: A B C, 5th & 6th editions, and Bentley's.

Paris Address: Etbs., Plaistowe, 11 bis,
 Rue Volney. Berlin Address: Leopold
 Laserson, Alte Jacobstrasse 20/22



LOOK FOR THIS SEAL—IT IS YOUR

GUARANTEE OF QUALITY

IODINE RESUBLIMED

POTASSIUM IODIDE

SODIUM IODIDE

IODOFORM

BISMUTH SUBNITRATE

BISMUTH SUBCARBONATE

MALLINCKRODT CHEMICAL WORKS LIMITED, MONTREAL

ESTABLISHED IN CANADA TWENTY YEARS

**HIGHEST
QUALITY**

**BRITISH
MADE**

EPSOM SALTS

*Commercial and B.P. Qualities
also Powdered*

Glauber's Salt

*Commercial and B.P. Qualities
and Desiccated*

Zinc Sulphate

Commercial and B.P. Qualities

Zinc Chloride

Fused, Granulated and Liquid

**WILLIAM
BLYTHE
& CO., LTD.**

Holland Bank Chemical Works

**CHURCH
LANCASHIRE**

Hyposulphite

of Soda Pea Crystals

Lead Arsenate

Paste and Powder

**Precipitated
Sulphur**

WEED KILLER

*A list of our general Technical
Chemicals sent on application*

Immaculately pure pharmaceutical **ZINC OXIDE** manufactured by



*The Symbol
of Quality*

The **NEWCASTLE-UPON-TYNE ZINC OXIDE CO. Limited**
BIRTLEY, COUNTY DURHAM

All enquiries to our Sales Office:—

RALPH NYE, BIDDLE & CO. Boston House, 63/4 New Broad St., E.C.2

Telephone : LONDON WALL 2754 (3 lines)

Telegrams : "NYLEDOXYD, Phone, London."

Gum Shellac
" Copal
" Damar
" Acacia
" Mastic
" Benzoin
" Tragacanth

Japan Wax

A. F. SUTER & CO., LTD.

133 Fenchurch St., LONDON, E.C.3

Telephone Nos. : MONUMENT 0347—0348

Telegraphic Address : SUTERESIN, FEN, LONDON.

RIPPIN FOR BENJAMIN

CALL AND INSPECT OUR SAMPLES.

Phone : ROYAL 2165.

A.J. RIPPIN, Ltd., 17 Harp Lane, E.C.3

CAFFEINE PURE ALKALOID
CITRATE
THEOBROMINE PURE ALKALOID
SODA SALICYLATE

AND ALL OTHER SALTS.

QUALITY STRICTLY B.P.

STOCKS HELD IN LONDON.

Societeit voor Chemische Industrie
"KATWIJK" (Holland).

Agent: ED. GREYER, Bush Lane House, BUSH LANE, E.C.4

Phone : MANSION HOUSE 9030.

STERLING BRAND CHEMICALS

MERCURIALS

SCALE
PREPARATIONS

STEARATES

ACETATES

PHOSPHORIC
ACID

RESEARCH
CHEMICALS

BISMUTH

IODIDES

**Thomas
Sterling** *Brand* **Tyrer's
Chemicals**

Thomas Tyrer & Co. Ltd., Stratford, E.15
Established 1844

Telephone : Maryland 2510 (2 lines)

Telegraphic Address : Tyremicus, Phone, London

Lightest, Medium, Dense, for Tooth Pastes and
Tooth Powder, and other Grades for every
purpose

PRECIPITATED CHALK

Also finest Powdered Talc and other Chalks

A. LEVERMORE & CO. LTD.
110 Cannon Street, London, E.C.4

Estab. 1868. Telephone: MANSION HOUSE 7300.

Telegrams: LEVERMORE, PHONE, LONDON.

Code: "ABC 6th Edition."

PURE STICK LIQUORICE · *Apollo* · JUICE Brand

The pure, concentrated extract of the finest
Liquorice Root, guaranteed unadulterated.
Rich in glycyrrhizin and therefore of high
pharmaceutical value.

Packed with bay leaves in 4-lb. cartons,
28 in a case.

Stocked by the
leading whole-
sale houses, or
write direct to
the manufac-
turers.



Telegrams:
"Macforbes Bush
London"

Telephone: Temple Bar 5392

BUSH HOUSE
LONDON, W.C.2.

MACANDREWS & FORBES LTD

PATENT PHOSPHATES AND MERCHANDISE LIMITED

ACID PHOSPHATES
CREAM OF TARTAR SUBSTITUTES
CREAM OF TARTAR 99/100 % B.P.
BRITISH GUMS—DEXTRINES
CHLORAMINE T.

DI & TRISODIUM PHOSPHATES
PURE GELATINES

CUTCH { BLOCK
CUBES } GAMBIE

PURE RICE STARCH CRYSTALS & POWDER
COMBINATION STARCH

SUGAR CANDY, all shades

OLIVE OILS
(Pyramid flasks, tins in cases and bulk)

PERBORATE OF SODA,
WHITELEAD, PAINTS, ENAMELS

6 FENNEL ST., MANCHESTER

THE DISCRIMINATING PHARMACIST always uses

WESSANENS

PRIME CACAO BUTTER

It is unequalled for the prepara-
tion of suppositories, pessaries,
bougies, emollient ointments, etc.
Being free from adulterants and having
a low melting point it can be relied
on for all pharmaceutical purposes.

KEENLY COMPETITIVE IN PRICE

Your usual wholesaler can supply or
you can get direct quotations from

A. PRESCOTT
12 BROOM LANE, BROUGHTON PARK
MANCHESTER

Chas. Zimmermann & Co. (Chem.) Ltd.

CHEMICALS

PHARMACEUTICAL : TECHNICAL : PHOTOGRAPHIC
ESSENTIAL OILS : GELATINES

SPECIAL MEDICAL PREPARATIONS

Preparation	Description	Packing
Angiolymphe (Dr. Rous)	A combination of the Glucosides of various Iridæ advocated in the treatment of Tuberculosis.	Boxes—6 × 2½ cc. Amps. Boxes—10 × 5 cc. Amps.
Asthmolysin (Dr. Weiss)	Suprarenal—Pituitary Compound..	Boxes—10 × 1 cc. Amps.
Bilival (Ingelheim)	Lecithin-Sodium-Cholate	Bottles—50 and 250 pills.
Cadechol (Ingelheim)	Camphor-Choleinic Acid	Tablets 1½ grain—Tubes of 20 Bottles of 100. Powder Bottles of ¼, ½ and 1 oz.
Camphogen (Ingelheim)	Aqueous Solution Natural Japan Camphor.	Boxes of 6 and 30 × 1 cc. Amps. 3/10 grain. Boxes of 6 and 30 × 2 cc. Amps. 3/5 grain.
Chinosol (Original)	Antiseptic, Deodorant, Disinfectant	Powder, Rods, Tablets, Dragees.
Devatol-A	Veterinary—Various strengths :— Yellow, Grey, Red.	Tubes of 10 Tablets.
Kathiolan (Mareussen)	Danisa treatment for Scabies ..	Tins—8 oz., 2½ lb.
Lobelin (Ingelheim)	Sterile Solution α-Lobelin Hel. cryst.	Boxes of 2, 6 and 30 × 1 cc. Amps. 1/20 grain and 3/20 grain.
Lysol (Dega Brand)	German made	Bottles—4, 8, 16, 32 oz. ½- and 1-gallon tins.
Necaron (Ingelheim)	Potassium Silver Cyanide—Potas- sium Cholate.	Powder—Bottles, ¼, ½ and 1 oz.
Nivea (Beiersdorf)	Cream Soap	In Toilet Pots and Tins. Single tablets and boxes of 3.
Pagenstecher's Eye Lotion	Original Formula	Bottles.
Papain (Dega Brand)	Digestive Ferment	Tablets, 4 grains—Bottles, 100 and 500. Powder—Bottles, 1 and 4 oz.
Pebeco (Beiersdorf)	Tooth-paste	Tubes.
Pericholan (Ingelheim)	Cadechol with Papaverin Hel. ..	Tablets, 2 grains—Tubes of 10 and 20. Bottles of 100. Powder—Bottles, ¼, ½ and 1 oz.
Posterisan	Hæmorrhoidal Suppositories and Ointment.	Suppositories—Boxes of 10. Ointment—Tubes.
Subitol	Ammon-Sulpho-Ichthyolate ..	Ointment—Toilet Pots, 2 oz. Lever tins, 1 lb.
Subitine	Medicinal Toilet Soap	Tablets.
Terpichin	Subitol-Glycerine Compound ..	Bottles, 3 oz. Tins, 1 lb.
Terpichin	Turpentine-Quinine-Anæsthesin in Sterile Olive Oil.	Boxes—10 × 1 cc. Amp.
Ultraferran	Colloidal Iron Tablets 6.6% Fe. ..	Bottles—100 Tablets. Hospital pack, 1,000 Tablets.

9-10 St. MARY-AT-HILL, LONDON, E.C.3

Telegrams : Acidolan, Bilgate, London.

Telephone : Royal 1866 (four lines).

The Old Strand Chemical & Drug Co. Ltd.

Telephone : ROYAL 8737 (2 lines).

Telegrams :

"OLSTRANKEM, PHONE, LONDON."

Cables : "OLSTRANKEM, LONDON."

Codes : A.B.C., Western Union, Marconi,
Bentley, and Private.

41. Great Tower Street,
LONDON. E.C. 3.

Ex Stock London

ISO PROPYL ALCOHOL	
MENTHOL	CAMPHOR
OLEUM MENTH. PIP.	
HEXAMINE	LYCOPodium
PHENAZONE	PHENACETIN
PHENYL ETHYL BARBITURIC	

We welcome enquiries for all Fine Chemicals—Alkaloids,
Essential Oils and Drugs

Roura & Forgas

14 Seething Lane
Gt. Tower Street
LONDON, E.C.3.

Telephone : Royal 2315-6.

Telegrams : Colleague, Fen, London.

QUICKSILVER

Send your Enquiries to the
Sole Importing Buyers
for the World

OF
MINAS de ALMADEN, MADRID. MONTE
AMIATA, S.A.M., ROME. R. MINIERA Di IDRIA,
TRIESTE. STABILIMENTO MINERARIO Del SIELE,
LEGHORN. SOCIETA MERCURIFERA ITALIANA, ROME



HARKNESS, BEAUMONT & CO. LTD.

Manufacturing Chemists
 Wholesale & Export Druggists - Malt Specialists
 LEITH, EDINBURGH

for

Strenthol Vitamin Malt, Sunray Malt and Malt & Oil, Bonum Irradiated Emulsion, Lactomaltine, Golden Grain Malt and Malt & Oil, Kem-Malt (Malt Extract with Parrish's Food), Kem-Malt & Oil (Malt & Oil with Parrish's Food), Bonum Cod Liver Oil Emulsion, Sunray Vitamin Cream, Liquid Extract of Malt, Special Liquid Cascara, Cascara Cordial, Sunray and Lucca Cream Olive Oils, and General Packed Specialties.

Telephone : Leith 1326-1328. Telegrams : "Mercury, Edinburgh."

Bishop's Notable



*Bishop's Natural
Fruit Saline on
Special Window
Display Terms
3 free with 3 doz.*

P.A.T.A. 2/3, 1/3, 8d.
per doz. 19/-, 10/-, 6/-
CARR. PD. ON £3 order

WRITE FOR PRICE LIST

Specialities



*Bishop's Varalette
for Gout*

Vials 1/6, doz. 14/-
Bottles 3/-, per doz. 29/-

30 days' treatment
7/-, doz. 66/-

48 Spelman St.,

M.L. F. I. N. T.

London E

AGENCY
BARCELONA
SYDNEY

We are always on the and so are the lines



Our latest Introduction

Aspirin is so universally in use that a larger size is definitely needed. This neat little container of 180 Tablets is ideal for storage in the home.

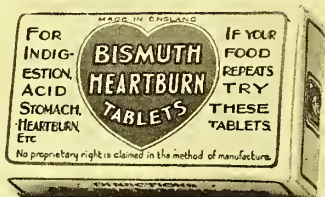
15/- per doz.

Retail 2/3

FAMILY SIZE ASPIRIN

**BISMUTH HEART-
BURN TABLETS.**

and improved
matter available.
lbs. 1/11 per lb.
Free Cartons.



ZOM BRAND PILE CURE OINTMENT

A very successful specific which can be recommended with certainty of good results.

5/6 per doz. Retail 1/-

THESE OLD LINES ALWAYS SELL



LANOLINE CREAM.

The many uses to which this cream can be put appeal instantly to possible customers. Skinfood, base for face powder, preventive of sunburn, etc.

6/- per doz. 2 oz. Retail 10 1/2 d.
10/- per doz. 4 oz. Retail 1 1/6



ROYAL TOILET SERIES.

The advantage of a series comprising all toilet preparations needs no stressing, and a sample of the Royal Series will convince you of its undoubted merits.

4 oz. 7/6 per doz. 6 oz. 7/- per doz.
2 oz. 6/- per doz.

To those firms who are interested in these lines, we would also mention that we are prepared to pack them under a special brand or trade mark, and would welcome your enquiries.

move
we sell-

THESE NEW
LINES ARE
SELLING



STOMACHIC POWDER
to the formula of Dr. Hugh
Maclean.
8/6 doz. Retail 1/6



4 Lines
which we have
lately introduced
that have already
proved them-
selves good
sellers.

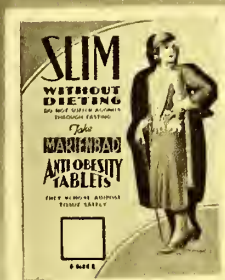


EPSOM SALTS
TABLETS (compound).
A convenient substitute
for ordinary Epsom Salts.
3/9 bottles of 50 cartonated.
Retail 6d.

KURBOIL BRAND
TABLETS
for the internal treat-
ment of boils.
7/6 doz. Retail 1/3

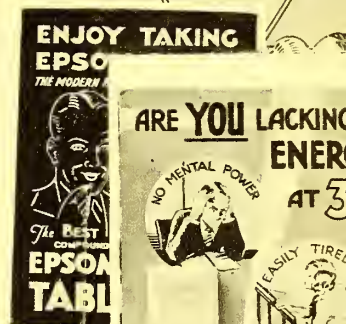


CHLOROPHYLL TABLETS
(compound).
Botts. of 60 cartonated,
6/6 doz. Retail 1/3



IS TO-DAY
QUICK
GERM KILLER
Prevent.

Put a stop
to that cold
NOW!
CURED
LET'S!
MORE THAN
3 MEDICINE.
IN 15



CHLOROPHYLL
TABLETS

AN ATTRACTIVE & POPULAR LINE

'Constipon'

GUARD YOUR HEALTH
CONSTIPON LAXATIVES

GUARD YOUR HEALTH
CONSTIPON LAXATIVES

CONSTIPON LAXATIVES
IDEAL FOR CHILDREN

In Boxes of
8 Tablets 3d.
18 Tablets 6d.
In Bottles of
40 Tablets 1/-



CONSTIPON 58, West Regent Street,
GLASGOW.

Harmless and Effective
for Children or Adults.
In Counter Display Outers.

WRITE FOR GENEROUS TRADE TERMS

Licoricine

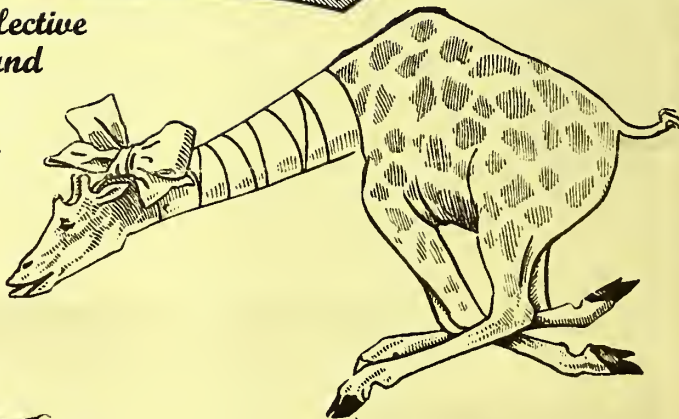
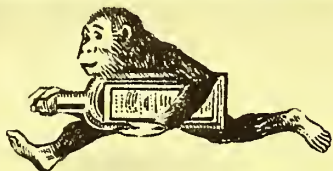
ACTS LIKE MAGIC

The recognised and really effective
Remedy for Coughs, Colds and
all Bronchial troubles

PRICES: 10½d. 1s. 3d. 3s. 0d.

TERMS.		
10½d. size -	8/6 doz.	Less 5% discount on
1/3 size -	12/- "	£6 orders. Carriage
3/- size -	27/- "	paid on orders of
		£2 or over.

A liberal supply
of Counter Bills,
Showcards and
New Advertising
Matter
gladly sent on
receipt of post
card.



"No Case
too bad!"

Running Sixty years and never beaten

MANDALL & Co. Ltd.

17-23, Stepney Rd., NEWCASTLE-ON-TYNE, 2.

Order from your
usual Wholesaler,
or direct from

"STERAID"

Regd.
Series of Surgical Gauzes & Lints
Made in England.

Introduced in 1924 to fill a demand for a Container which would be simple to handle without contamination of contents. Only that quantity required for immediate use is drawn out of the Container.

Patent Number 221761.

GAUZES
(Super Quality).
Plain Absorbent
Sal Alembroth, Boric, Sublimate, Carbolic
Double Cyanide
Pieric and Iodoform
LINENS
(Super Quality).
Plain or Boric

Minimum Trade Prices		Minimum Trade Prices	
Per doz.	3-yd.	1-yd.	2-in.
6-yd.	15/-	9/4	5/3
15/-	10/6	5/7½	
17/6	10/7	5/9	
24/-	13/10	6/9	
6-in.	4-in.	2-in.	
13/6	8/-	6/9	

Rotate flange until dressings appear.

"ZORBO"

PNEUMONIA JACKETS

P.A.T.A. PRICES.

Size	1.	2.	3.	4.	5.	6.	8 × 6	10 × 8	12 × 10	15 × 12	19 × 13	21 × 15	Extra Large
Infants'													
Children's													
Adults'													
Large													
each	71d.	81d.	111d.	111d.	111d.	111d.	111d.	111d.	111d.	111d.	111d.	111d.	111d.
dozen	5/3	6/1	7/9	9/1	11/7	13/4							
Retail Whole-sale													

"CYNTA" Regd. SANITARY "TOWELINES" Regd.

No inferior Filling.

Size	0	1	2	3	4
1/-	1/2	1/7	2/-	2/3	per doz. pkt.
8/9	10/2	13/9	17/5	19/7	per doz. pkt.
Size "Superior" (Thick pad with Bandage ends).					
3/- per pkt.					26/- per doz. pkts.

"CYNTA" COMPRESSED TOWELINES

Size	1	2	3
2d. each	21d.	each	3d.
15/3	10/1	20/4	
per gross		per gross	per gross
also each in Carton with Safety Pins.			

Size	1	2	3
21d. each	18/10	each	3d.
16/- per gross		per gross	per gross
			21/1 per gross

"ZORBO" Regd. Extra Superfine Absorbent COTTON WOOL

Introduced in 1914 by the request of a number of Doctors. It is a perfect Surgical Cotton, made from carefully selected pure long Stapled Cotton. Sterilised in Packets, Cartons or hermetically sealed Tins.

MINIMUM PRICES.		MINIMUM PRICES.	
Packets	Cartons	Tins	
16-oz.	8-oz.	4-oz.	2-oz.
3/6	1/9	1/1	1/1
3/8	1/11	1/3	1/3
4/4	2/4	1/3	1/3
28/-	14/6	7/5	3/11½
29/7	15/3	8/-	4/5
34/9	18/6	10/1	6/6

"Eminently suitable for surgical purposes."
All prices subject to alteration without notice.

ROBERT BAILEY & SON LTD., MARRIOTT STREET MILLS, STOCKPORT

HIGH-CLASS SURGICAL DRESSINGS OF GUARANTEED BRITISH MANUFACTURE.

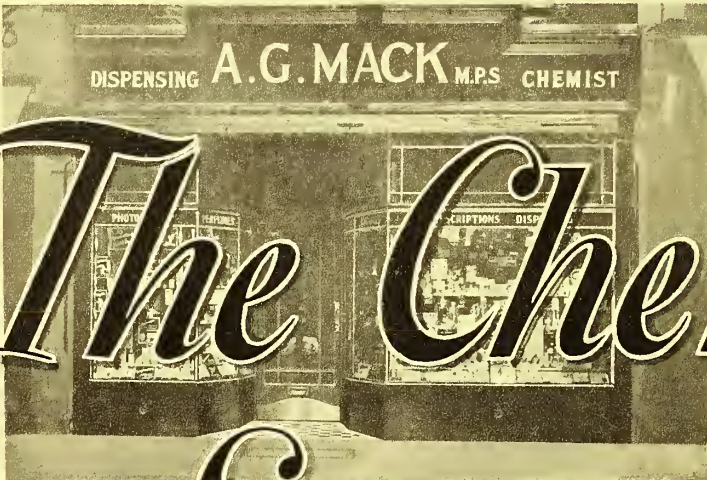
Telegrams: "Undisputed, Stockport."

Telephones: 2794, 4166, Stockport.

London Office: Sentinel House, Southampton Row, W.C.1.

Phone: Museum 8340/69.

WHOLESALE AND EXPORT ONLY.



The Chemists' *Shopfitters*



OP FRONTS

SCIAS

GNS

OW CASES

OP FITTINGS

OP ROUNDS



Philip Josephs & Sons Ltd

PHARMACY
FITTEES FOR
OVER A CENTURY

90/92 ST. JOHN STREET,
CLERKENWELL, LONDON, E.C.1.

Telephone : Clerkenwell 2191.
Telegrams : " Josiphiah, Barb, London."

Precipitated Chalk

"Sturge's Standard"

All Grades.

Special attention given to requirements of Dentifrice Manufacturers.

Write for our Booklet on this subject.



Citric Acid

Citrate of Soda, Citrate of Potash, Ferri et Ammon. Cit.

ROCHELLE SALTS, BICARBONATE OF POTASH.

JOHN & E. STURGE, LTD.

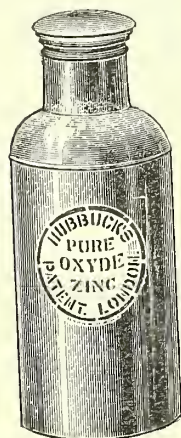
WHEELEY'S LANE, BIRMINGHAM.



IONONES

METHYL IONONES

WHITE, TOMKINS & COURAGE LTD
REIGATE, SURREY



Hubbuck's Pure Oxide of Zinc

is made by sublimation, and is
warranted to contain upwards of

99.9 PER CENT.

of pure oxide; in fact, the
impurities are not traceable

Thos. Hubbuck & Son, Ltd.

ESTABLISHED 1765

24 Lime Street, London, E.C.3

**MANUFACTURERS OF WHITE LEAD, WHITE
ZINC, PAINT, OILS, COLOURS, VARNISHES, &c.**

Australian Office: 34 Queen Street, Melbourne

*Sold by the following Wholesale Druggists
in Boxes of 7 lb. and 14 lb. stamped by
the Manufacturers: also in 1-lb. Boxes
and 1-lb. Glass Bottles:*

Allen & Hanburys, Ltd.	Hodgkinson, Prestons & King
Ayrton Saunders & Co., Ltd.	Horner, L. A., & Sons
Bell, Jno., & Croyden	Huskisson, H. O., & Co.
Bell, John, Hills & Lucas,	Lothouse & Saltmer, Ltd.
Ltd.	Mackay, Jno., & Co., Ltd.
Bleasdale, Ltd.	May, Roberts & Co., Ltd.
Boots Pure Drug Co., Ltd.	Oldfield, Pattinson & Co.
British Drug Houses, Ltd.	Pinkerton, Gibson & Co., Ltd.
Burgorne, Burdidge & Co.,	Potter & Clarke, Ltd.
Butler & Crispe	Raines & Co.
Cockburn & Co., Ltd.	Raines, Clark & Co., Ltd.
Dakin Brothers	Rankin & Borland
Duncan, Flockhart & Co.	Silverides, R. B. G.
Evans, Gadd & Co., Ltd.	Smith, T. & H., Ltd.
Evans Sons Lescher & Webb,	Southall Bros. & Barclay, Ltd.
Ltd.	Sumner, R., & Co.
Ferris & Co.	Taylor, Jas. (Tringate), Ltd.
Gale & Co.	Thompson, John, Ltd.
Glasgow New Apothecaries	Wilkinson & Simpson, Ltd.
Co.	Willows, Francis, Butler &
Goodall, Backhouse & Co.	Thompson, Ltd.
C. R. Harker, Stagg &	Woolley, Jas. Sons, & Co.,
Morgan, Ltd.	Ltd.
Hartness, Beaumont & Co., Ltd.	Wright, Layman & Umney,
Hartick, W. R., & Co.	Ltd.
Hirst, Brooke & Hirst	Wyleys (Lum.)
Barry, E. J., New York	Muth Brothers & Co., Balti-
Finkley Dicks & Co., New	more
Orleans	Palmer, Ltd., Montreal
E. Fougere & Co.,	S. B. Penick & Co., Inc.,
90-92 Beekman Street,	New York
New York	Roller & Shoemaker, Phila-
Chas. L. Huisking & Co., Inc.,	delphia
155 Varck St., New York	Schiffelstein & Co., Inc., New
Lehn & Fink, Inc., N. York	York
McKeeson & Robbins, Inc.,	Shoemaker & Busch, Phila-
New York	delphia

SOLAZZI LIQUORICE JUICE

should be stocked by every chemist

BECAUSE it is recognised by the leading Medical Journals as the Standard of purity in Liquorice

BECAUSE it has enjoyed an uninterrupted sale to the public for over 100 years

BECAUSE the sale is helped by steady and intelligent advertising

IT IS PRE-EMINENTLY THE CHEMISTS' BRAND OF LIQUORICE

Should any enquiry as to the composition of Solazzi be received from the public, chemists are asked to emphasise the fact that it is the pure unadulterated product of the finest Calabrian Liquorice Root, and that a guarantee is included with every parcel.

RIVISTA ITALIANA DELLE ESSENZE E PROFUMI

(Affiliated to the Technical Press Association.)

FOURTEENTH YEAR OF PUBLICATION

Official Organ of the Group of Producers of Aromatic
Substances of the National Fascist Federation of Chemical
and Allied Industries.

Director : - - - - Dr. EMMA FENAROLI

Editorial Offices : - VIA S. VINCENZO N.38 MILAN

Telephone : 31 216-C.P.850.

Producers of Aromatic Substances for Perfumery—Manu-
facturers of Articles used in the Perfumery Trade—This is
the Periodical in which to Advertise effectively in Italy.

MAKE USE OF ITS ADVANTAGES

SAMPLE COPY AND TARIFF ON REQUEST.

QUININE

QUINIDINE
CINCHONINE
CINCHONIDINE

and
SALTS

Sugar-coated Quinine Tablets and Pills.

Gelatine-coated Oval Pills.

BANDOENG
JAVA

BANDOENG QUININE FACTORIES

AMSTERDAM
De Wittenkade 48-50.

Telegrams: "Kininetabriek Bandoeng."

Samples, prices and particulars on application.

Telegrams: "Semadmy Amsterdam."

Chemische Fabrik
JOH. A. BENCKISER, G.m.b.H., LUDWIGSHAFEN - ON -
RHINE

TARTARIC ACID IN POWDER
CRYSTALS and
GRANULATED

GUARANTEED IN STRICT ACCORDANCE WITH B.P.'14

ACID PYROPHOSPHATE OF SODA

Quality in all respects equal to Cream of Tartar, especially as regards stability of Baking Powder

W. BREDT, LTD.

MEDICINAL PRODUCTS

ANTICOMAN (Berlin)
BISMOGENOL (Tosse)
BLUTAN (Helfenberg)
CAPSIFOR (Helfenberg)
CHOLOTON (Promonta)
DESITIN OINTMENT, &c. (Desitin)
DYSENTULIN (Meyer-Castens)
EUTONON (Promonta)
HEPATOPSON (Promonta)
HISTOPLAST (Laboschin)
INKRETAN (Promonta)
MEINICKE'S ANTIGENS for MKR.
NEUROSOMON (Promonta)
NITROSCLERAN (Tosse)
PNEUMAROL (Helfenberg)
PRAEPHYSON (Promonta)

**A
L
W
A
Y
S
I
N
S
T
O
C
K**

PRAEJACULIN (Promonta)
PROKTOSOL SUPPOSITORIES (Cohrs)
PROMONTA FOOD (Promonta)
QUADRONAL (Asta)
QUADRO-NOX (Asta)
RECRESAL (Albert)
REGULIN FLAKES (Regulin)
RISIN (Pharm. Ind., Wiesbaden)
SULFOFORM (Kaufmann)
TESTIFORTAN (Promonta)
THALASSAN (Promonta)
THILOCOLOGNE Ethyl Chloride
THYANGOL PASTILLES (Thilo)
VALIDOL (Zimmer)
VALOFIN (Helfenberg)
"YSATE" DIALYSATES (Buerger)

We have special facilities for obtaining preparations not marketed in this country.

**38 GREAT TOWER STREET
LONDON, E.C.3**

TELEPHONE: ROYAL 2668 & 3697.

TELEGRAMS: "JALAP," LONDON.

"SUPERLIN"

(Registered Trade Mark)



SUPERLIN FLUID AND
POWDER IS MANUFACTURED
IN ALL STRENGTHS FOR
ALL PURPOSES.

**MANY COUNCILS AND HOSPITALS
INVITE TENDERS FROM LOCAL
CHEMISTS for the supply of DISINFECTANTS**

**SUPERLIN, THE CLEAN
DISINFECTANT FLUID**

is supplied in bulk for this purpose

The Profit is Good

WHY NOT WRITE FOR PRICES, SAMPLES
AND LITERATURE TO BE PREPARED?

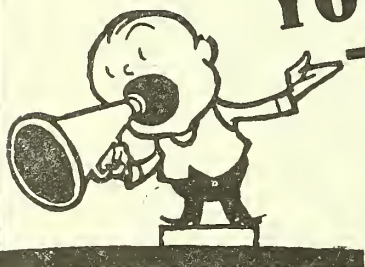
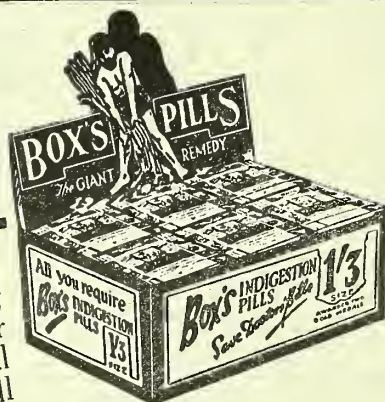
WRIGLEY, PATERSON & CO. LTD.

DEPT. "C," SUPERLIN WORKS, ISLEWORTH, MIDDLESEX
Phone: Hounslow 2604. Wires: "Superla, Isleworth."

Distributing Agents:

CHARLES JONES, RADFORD & CO., Ltd., 80 Coleman Street, London, E.C.2. Tel: Met. 9204

JUST TELL YOUR PUBLIC



that you have Box's Pills in stock by putting eye-catching display outers on your counter and forceful display material in your windows and you will soon realise that the demand for this famous remedy has already reached useful proportions.

Profitable business is being done, especially by enterprising Pharmacists who let the public know. Box's Pills may be ordered through your usual wholesaler, but counter and window display material (free on request) is only available direct from the manufacturer

W. H. BOX, 161 King St., Plymouth
Telegraphic Address "Giant Plymouth"

NEOKLENZ NATURE CURE

Ready to take in its natural state.

Cures Constipation and Rheumatism.
Cleanses the Liver and Kidneys.

9d. size 5/- per Doz.
1 Gross Free Samples with 3 Dozen.

Dr. NORMAN'S ASTHMA CIGARETTES

9d. size 6/- per Doz.
Smartly packed and Showcards.

ATLAS KATTLEKURE The Wonder Ointment.

1/6 size 12/- per Doz.
2/6 " 20/- " "
5/- " 40/- " "

Your enquiries are invited and appreciated.

Sole Proprietors:
CARTER BROS., SHIPLEY, YORKS.

ARCHANIUM

RECOGNISED BY MANY
DOCTORS AS THE

BEST REMEDY for

**RHEUMATOID ARTHRITIS,
OSTEO-ARTHRITIS, LUMBAGO,
SCIATICA, NEURITIS,
RHEUMATISM.**

Liberal Terms: Write for full particulars to:

Distributors: **STAPLETON & SON, Yew Tree Rd.,
SOUTHBOROUGH, Kent.**

Rep. in Ireland: **R. I. VINT, 6 Elgin Rd., Dublin.**

PERRY'S POWDERS



GIVE A GOOD RETURN.

NICE TO HANDLE—EASY TO SELL

Wholesale from **PERRY'S POWDERS, Ltd., LEEDS.**

COLLOSOL CHLOR-CARVACROL

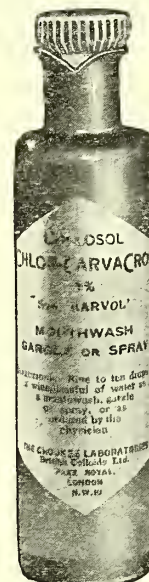
Synonym 'KARVOL'



'Karvol' is a new Collosol preparation for use as a mouth wash, gargle or spray in the treatment of septic infections.

'Karvol' is a substance similar to Thymol, but while the latter has a carbolic acid co-efficient of 20, that of 'Karvol' is 144.

'Karvol' is economical in use—5-10 drops in a wineglassful of water—and is supplied in 1 oz. lipped vials retailing at 2/6 and subject to our usual trade discounts.



THE CROOKES LABORATORIES
(BRITISH COLLOIDS LTD.)

PARK ROYAL, LONDON, N.W.10

Telephone—
Willesden 6313 (3 lines)

Telegrams—
"Collosols, Harles, London."

CAVENDISH CHEMICAL CO. (New York), LTD. 137 Regent Street, London, W.1

TESTOGAN tablets and ampoules
THELYGAN tablets and ampoules
YOHIMBIN tablets and ampoules
LECITHIN-YOHIMBIN tablets and pills
LIPOLYSIN tablets and ampoules
BISMOLAN suppositories and ointment
ATOCIN tablets
ATOCIN with **ASPIRIN** tablets
MYOSTON Skeletal Muscle Extract
ELIXIR NEUROGENIC (Cavendish)

Literature and further information on application

Iglodine

THE SAFE AND PURE ANTISEPTIC,

And its Kindred Preparations, are Dependable,
Quick-Selling and Profitable to the Chemist.

THEY SATISFY BUYERS AND BRING REPEAT ORDERS!

IGLODINE, the Ideal Home Healer, is Highly Recommended by the Medical Faculty, and Retailers at 10/-, 1/6 and 3/- per Bottle. **IGLODINE** Specialities include—**EMBROCATION, TOILET SOAP, OINTMENT, CREAM, THROAT TABLETS, SUPPOSITORIES, SHAVING STICK, PASTILLES, NASAL DOUCHE, SALICYLATED**: Also **FIRST-AID OUTFITS**.

P.A.T.A. Photo-Litho Showcards: Window Display Scheme
Particulars and Prices from

THE IGLODINE Co., Ltd., NEWCASTLE-ON-TYNE.

MEL ROSE— NEW CENTURY CREAM

With all the Mel Rose curative properties, also an effective remedy for Sunburn troubles (sore skin, blistering, etc.), quickly restoring skin to normal condition. A little used prior to exposure to the sun, eliminates all the usual discomfort. Sold in tubes of convenient size and shape for the handbag. - - Price 6d. & 10½d.

MEL ROSE— CREAM

Sold in jars for the dressing table. Contains all the remedial properties of the tablet made up in softer form 9d.

MEL ROSE— TABLETS

There is a demand for this product during the summer for keeping the skin in good condition 2d. & 4½d.

FOR YEAR ROUND SALES
STOCK MEL ROSE PRODUCTS.

ROBERTS & SHEPPEY Sole Manufacturers
2 SKIPTON STREET, LONDON, S.E.1



TRADE MARK

KANEON BRAND
PILLS & TABLETS

BULK and PACKED GROSSES and MILLIONS

A postcard will bring to your door this distinctive Show Card in colour print and PRICE LIST.

Send to **MATTHEWS & WILSON (1931), LTD.**
6/8 Cole Street, Boro., S.E.1. *Established 1894.*

Phone : Hop 6610
6611

Telegrams : Pilleolum,
Sedist, London.

Entered at Stationers Hall, copyright

Tablets

Enquiries are invited for ASPIRIN AND CASCARA TABLETS

IN BULK OR PACKED.

A Customer writes :—"Re Aspirin Tablets. Your sample was one of the best we have ever had, we anticipate doing good business with you if you can maintain that quality."—WE CAN, AND MEAN TO!!

LET US QUOTE YOU
CASTLE HUSKISSON, LTD.

Manufacturing Chemists,
Swinton Works, Moon St., Islington, N.1
ESTAB. 1768.

Private formulæ Pills and Tablets carefully and accurately prepared at lowest possible prices.

Pills

The **SUDEX** Co., Ltd.
5 Harp Lane,
LONDON, E.C.3.

SAMPLES & QUOTATIONS
FOR ANY QUANTITY

SENNA PODS
ALEXANDRIAN TINNEVELLY

SALES OF "TENZ" TAKE AWAY THE BREATH

"Tenz," the tablets that sweeten the breath without scenting it, are being used by people in every walk of life.
"Tenz" Antiseptic Tablets instantly remove all odours from the breath. There is a universal demand for this line. Keep the dainty Display Box on your counter, and get your share of the sales. Sells at 3d. per tube and shows big profits. Order direct or from your usual Wholesaler.

Tenz Manufacturing Co., 8 Fairfield St., Manchester

TABLETS

We specialise in tablets of all kinds. For 30 years we have been making them and use nothing but drugs of guaranteed purity.

SPECIAL LINES :—

"Adipos" for Obesity. "Celeroids" for Rheumatism.
"Hyprox" Tablets (Solid Hydrogen Peroxide).
Rejuvenative. Pile Cure.
Rheumatic. Brain and Nerve.

ALL EARNING BIG PROFITS.

All put up as your Own Speciality.

Consult us in all difficulties in compounding special formulas into tablets

Send for Samples and Prices of all Seasonable Lines.
SUPERIOR PRODUCTS. KEEN PRICES.

BUCKLEY-BOWKER TABLET Co., Ltd.
29 PARKFIELD STREET, LONDON, N.1.

URALYSOL

Thyminic Acid — Hexamethylene-Tetramine — Lysidin

TREATMENT of the RHEUMATIC DIATHESIS

IN TABLETS OR GRANULES

RETAIL 4/-

P.A.T.A. Prices 33/- per doz.

From all Wholesalers or direct from:

CONTINENTAL LABORATORIES, Ltd.

30 Marsham Street, London, S.W.1

"Taxolabs, Sowest, London."

Victoria 2041.

BESORBON

(Dr. Hill's Formula)

MEDICINAL SNUFF. ABSOLUTELY THE
FINEST REMEDY FOR CATARRH AND
COLD IN THE HEAD.

Richard Dickeson & Co. (Incorporated with Reynolds, Sons & Co., Ltd.)
57-59 CHARTERHOUSE STREET, LONDON, E.C.1

DUTCH DROPS

The Original HAARLEM OIL

Classically

Also in Capsule Form.

We are Sole Distributing Agents for the British Isles, British
Colonies, Scandinavian Countries, Spain and South America.

BROOK, PARKER & CO., LTD., BRADFORD

SPECIAL PRICES ANNOUNCEMENT—

Will the Trade please note that the 5/- size of

TEASDALE'S CHLORODYNE

has now been discontinued and the sizes now available
retail at 1/3 and 3/6.

Obtainable from your usual wholesaler or direct from
THE TEASDALE'S CHLORODYNE CO., 75 Fitzwilliam Street,
HUDDERSFIELD

GARFIELD TEA

FOR CONSTIPATION

PROMPT SHIPMENT

ALL SIZES

'Phone or Write :

GARFIELD TEA CO.

44 Foxbourne Road

BALHAM, LONDON, S.W.17

Ampoule Files



THE GREATEST PRODUCTION IN THE WORLD

THE BEST. THE CHEAPEST.

Prices and Samples sent on application to

SIM Ltd., Morges, Switzerland.

For OVER 75 YEARS

Dr. J. Collis Browne's
CHLORDODYNE

has maintained a

WORLD-WIDE REPUTATIONTO-DAY'S DEMAND BEING
GREATER THAN EVER.**ARE YOU GETTING
YOUR SHARE OF
THIS INCREASE ?**Be sure you hold stocks
to meet the demand and
remember that**Dr. J. Collis Browne's**
CHLORDODYNE**IS ONLY SOLD THROUGH CHEMISTS**SIZES **1/3, 3/-**Order from your Wholesaler
with other goods.SOLE PROPRIETORS :
J. T. DAVENPORT Ltd.
UNION STREET, S.E.1**SELL TO
MOTORISTS****H**ERE is the Soap you have been
looking for. A pumice block
which looks like a high grade
toilet soap—and lathers like one, too.
And at a price which is within the
reach of all.**CALVERT'S
PUMICE SOAP****SPECIAL OFFER**On orders of £4
2/- doz. less 10% and 2½% cashOn orders of 54/-
2/- doz. less 5% and 2½% cash*NOTE.—Orders need not be confined to
Calvert's Pumice Soap solely, but can include
any of our other well-known lines.***F. C. CALVERT & CO., LTD., Manchester****ERGOAPIOL**
(Smith)Protective Mark
Patented in U.S. and
Foreign Countries.Ergoapiol
(Smith) is iden-
tified by the let-
ters "M. H. S."
raised in the gel-
atin on the inside
of each cap-
sule—thus—Capsule cut in half thru
the seam, showing
initials.Capsule intact, showing
no mark objectionable
to the physician.[Ergoapiol (Smith) is to be had only in packages of twenty
capsules each—never supplied in bulk or other form.]**MARTIN H. SMITH CO., New York, N. Y., U. S. A.****KOMPO**
FOR
COLDS**Wholesale
Prices**1/3 Size
11/6 per dozen net
3/- Size
27/6 per dozen netCarriage Paid Gross Quantities
or equivalent.

Manufactured only by

J. F. WHITE & CO., Chemists
BENSON STREET, LEEDS.



40,000,000 POTENTIAL BUYERS

DR. I. BROOK'S COMPOUND (BRAND) CLAUBER SALTS TABLETS

Ingredients :

Sodii Sulph. Exsicc. - Phenolphthalein - Potassii Iodid. - Zingiber - Kaolin

FOR **CONSTIPATION LUMBAGO BILIOUSNESS**
RHEUMATISM GOUT FLATULENCE
SLIMMING HEADACHES INDIGESTION
SCIATICA NEURALGIA HIGH BLOOD PRESSURE

THEY SELL ON SIGHT. SUPPORTED BY
 ADVERTISEMENTS IN THE NATIONAL PRESS.
 LOOK TO YOUR STOCKS!!

Supplied in attractive 2-colour Inners and Outers.
 "Selling" show cards and advertising material free.

7½d. size — to the Trade 5/- per doz.

1/3 " " " 10/- " "

2/6 " " " 20/- " "

BONUS: For Orders of not less than 3 doz.—one
 extra Bottle to each dozen.

A FEW OVERSEAS
 MARKETS STILL
 OPEN FOR
 REPRESENTATIONS.

Stocked by
 the leading
 Wholesalers
 in the
 country

WESTMINSTER LABORATORIES LTD.
 4-12 PALMER ST., WESTMINSTER
 LONDON, S.W.1

'Phone : Victoria 2414 (2 lines).

Telegrams : Westlabora, London

GLAND TREATMENT



Rejuvenating Tablets

Co-operation of Chemists
and Medical men invited.

FREE BOOKLET
 sent upon request.

SEVEN O SEVEN
 LTD.

6-7-8 Old Bond Street
 London, W.1

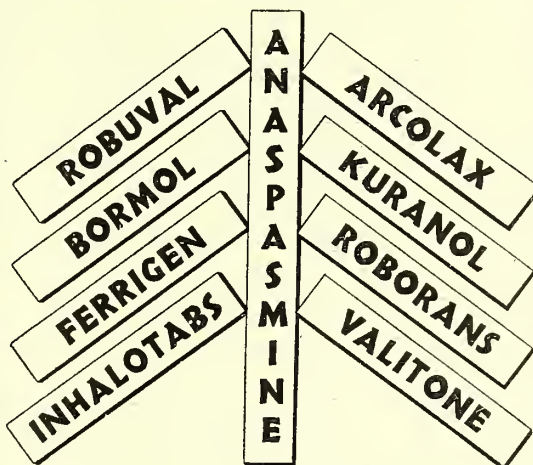
Memo :

RE-ORDER
ZAM-BUK

Sole Proprietors : C. E. Fulford, Ltd., Carlton Hill, Leeds.

Ointment & Medicinal Soap

PRESCRIBED LINES



Manufactured and Advertised
 to the Medical Profession by

ROBERTS and CO.

Pharmaciens to H.M. The King

76 New Bond Street, London, W.1

and at Paris

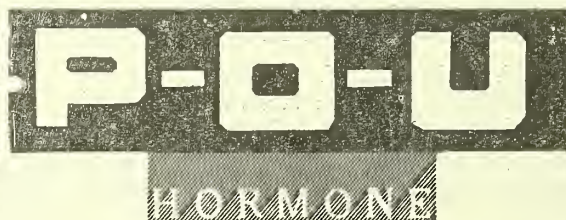
'Phone : Mayfair 4173

Grams : Parilond, London

Treatment for CANCER

DR. T. ISHIHARA'S

Patent No. 352620 (Great Britain).
Patent No. 88650 (Japan).



A treatment for cancer and erosion of os uteri, prepared from new endocrine organs based upon Dr. Ishihara's new theory of Umbilical Cord Hormone.

Indications

- (a) Cancer of stomach, intestine, uterus, etc.
- (b) Erosion of os uteri.

Directions for Use and Doses

Doses: 0.3-0.6 gm. (3-6 tablets) per day administer per os between meals.

Injection: 1 c.c.-2 c.c. per day, Hypodermically.

PACKING

P-O-U { Powder 5 g (code: POUB)
Tablets 50 tab. (code: POUM)
Injection 1 c.c. x 10 (code: POUH)

For particulars apply to

TRADE  MARK

Nippon Shinyaku Co.,
LIMITED

Manufacturing Chemists
KYOTO JAPAN

Cable Address:
"NIPPONSHINYAKU KYOTO"

Code:
A.B.C. 6th Edition

BAISS BROTHERS & CO. Ltd.

WHOLESALE DRUGGISTS AND
MANUFACTURING CHEMISTS

Druggists' Sundries and Surgical Appliances

DRUGS All drugs for sale and use are carefully selected and graded and customers can rely on our superior and uniform quality.

CHEMICALS We hold stocks of all the chemicals normally required in Modern Pharmacy and guarantee them to answer the requirements of the official standards.

PHARMACEUTICAL PREPARATIONS

Prepared in our well appointed laboratories under scientific supervision and subjected to rigorous analytical control. We particularly specialise in such well-known articles as SYRUP FERRI PHOSPH. CO. (Bais), LYSOL (Bais), COD LIVER OIL EMULSION C HYPOPHOSPHITES (Bais), TINCTURES, EXTRACTS, SYRUPS, OINTMENTS, SALINES, PILLS, TABLETS, etc.

SUNDRIES Our fully-equipped druggists' sundries and surgical instrument departments hold large stocks and welcome your enquiries for N.H.I. DRESSINGS AND SURGICAL APPLIANCES. Special rates for quantities and contracts.

PACKED GOODS PROPRIETORS OF "THREE BEES BRAND" and "GRANGE BRAND." All suitable lines attractively packed with own name on minimum agreed quantities.

Customers' own formulæ prepared and packed. Confidential work undertaken.

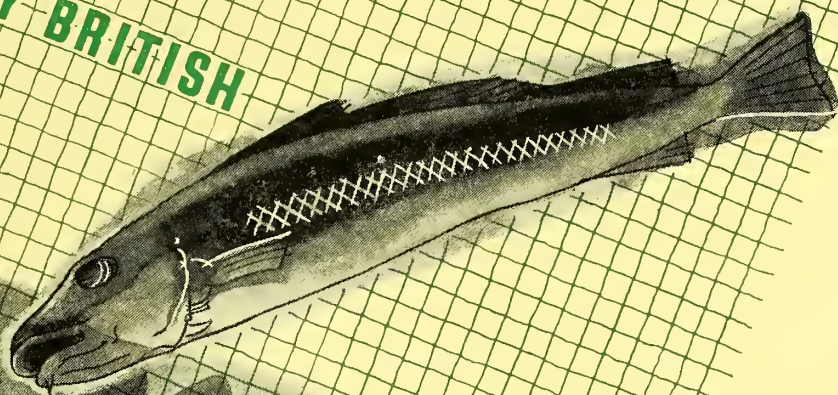
PROMPT DELIVERY PRICES ON APPLICATION

OFFICES AND LABORATORIES:

174-176 Grange Rd. Bermondsey, S.E. 1

'Phone: BERMONDSEY 1301 (3 lines) 'Grams: IPECAC, LONDON

BUY BRITISH



FINEST

MEDICINAL

NON-FREEZING

COD LIVER OIL

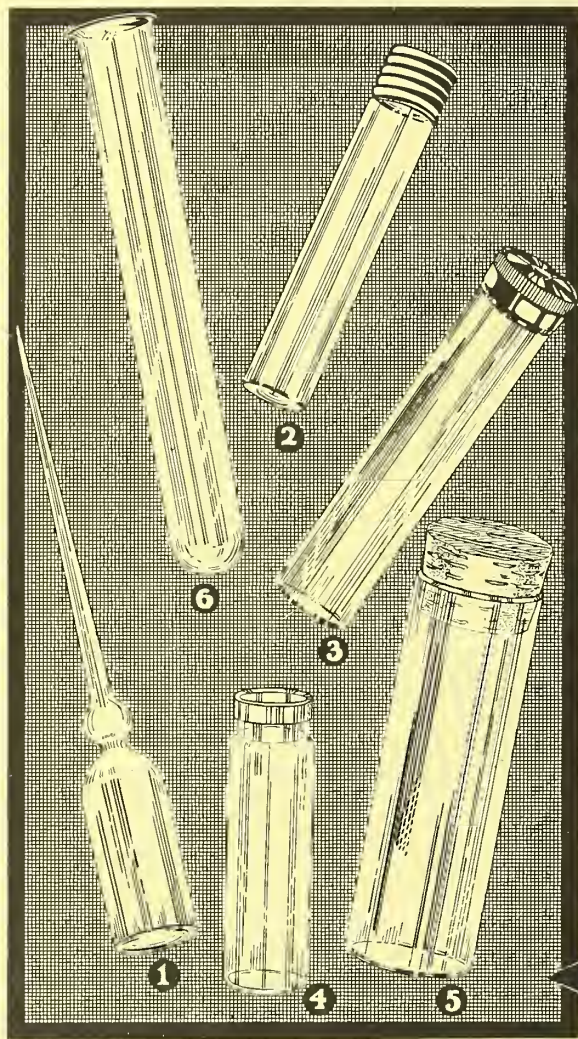
ISCO brand

*Selected and Specially
graded. High Vitamin test.*

ISAAC SPENCER & CO.
(ABERDEEN) LIMITED
ALBERT QUAY
ABERDEEN - SCOTLAND

SUPERIOR QUALITY

GLASSWARE



ILLUSTRATED

- | | |
|--------------------------------------|-------------------------------|
| 1. Ampoule | 4. Viol |
| 2. Screw Neck Viol | 5. Flat bottom tube with cork |
| 3. Flat bottom tube with push-on cap | 6. Test tube |

BUY BRITISH
SAVE MONEY

MANUFACTURING chemists and others who are large users of this type of glassware can now **BUY BRITISH**—get a superior article—and definitely save money!

In the past, Continental manufacturers—with lower labour costs—held the market! To-day, after years of experiment in mass production methods, we have succeeded in producing a higher quality of article fully tested and well finished—to sell at a cost lower than Continental prices!

This glassware is now actually made at our London Factory by these methods—it is British throughout—and better.

It is a great opportunity for manufacturing chemists—to cut down their costs on glassware.

Next time you are ordering may we quote you? It will save you money! Please file this page for reference.

GLASSWARE

All Enquiries to—

S. MURRAY & Co. Ltd.

RECORD HOUSE

11 & 13, FARRINGDON RD., E.C.1.

PHONE: HOLBORN 0717-0718.

WHOLESALE ONLY SUPPLIED

Let Us QUOTE YOU

for your next order!

ALKALOIDS

FINE CHEMICALS

ALOIN
 STRYCHNINE
 EPHEDRINE
 MORPHINE
 CAFFEINE
 CODEINE
 ESERINE

CHLOROFORM

Purity and Stability are of the first importance with this Article. Our long experience enables us to produce an anæsthetic Chloroform of reliable and standard composition answering the tests of all Pharmacopœias

Salicin
 Capsicin
 Cantharidin
 Podophyllin
 Hyoscyamine
 Homatropine
 Jalap Resin
 Iridin
 Gingerin
 Bismuth Salts
 Opium
 Santonin
 Veratrine
 Atropine
 Chrysarobin
 Emetine
 Ergotin
 Leptandrin
 Ethyl Morphine
 Diamorphine
 and other Pharmaceutical
 Chemicals and Preparations

Blandfield Works
 Edinburgh

T. & H. SMITH LTD.

32-34 Virginia St.
 Glasgow

ESTABLISHED OVER A CENTURY

25 Christopher St.

London, E.C.2



PARKINSONS' PROFITABLE POPULAR PILLS

In 1d. and 3d. boxes. These Sugar-coated Pills are made under hygienic conditions, supervised by qualified chemists and are obtainable as follows: Back & Kidney, Blood & Stomach, Head & Stomach, &c. Parkinsons' 'EZ' Ease Head Powders, 1 3, 3 - cartons.

PARKINSONS

Manufacturing Chemists

BURNLEY

PROFITS



GOOD PROFITS are assured from these three fast-selling VENO Products!

GERMOLENE OINTMENT BRAND

The skin medicament that "soothes at a touch." A line that will right royally repay you for a small space in the window or on the counter.

DR. CASSELL TABLETS BRAND

Another line that will most certainly earn for you a good measure of profit in return for your co-operation. A genuine "repeat" line.

VENO Lightning COUGH CURE BRAND

Whatever the weather, colds and chills continue. Recommend Veno Cough Cure—its speedy action earns the gratitude of all who use it.

MAKE SURE YOUR STOCKS CAN FILL THE EVER-GROWING DEMAND

SO brisk is the demand for VENO Products and so profitable are they to handle that valuable profits are lost by allowing stocks to run short.

These lines, long regarded as best sellers in the Drug Trade, have the support of a tremendous advertising campaign. This makes it impossible for you to be left with any unsaleable stock of Veno remedies. Not without good reason, then, do we say, "Look to your stocks" now!

Write for terms and display material to the—

VENO DRUG CO. (1925) LTD.

CHESTER ROAD, MANCHESTER

Sell more Porous Plasters!

THIS NEW REGISTERED DISPLAY BOX WILL SELL THEM FOR YOU

A unique and novel container—it provides a remarkable stimulus to sales.

Display a box on your counter and watch how quickly they sell.



ORDER FROM
YOUR USUAL
WHOLESALE OR
ASK US TO SEND
YOU FULL DETAILS

William Mather Ltd.

DYER STREET, MANCHESTER

Incorporating Mace & Haldane, late of London, E.C.1

BRADY & MARTIN LIMITED

ACTUAL MANUFACTURERS OF—
GALENICALS, MILLED OINTMENTS,
CAPSULES, PILLS, TABLETS, MALT
EXTRACTS, COD LIVER OIL EMULSIONS.

ORIGINAL MAKERS of THYROID EXTRACTS for THERAPEUTIC USE
(1891) AND MAKERS ALSO OF OTHER ENDOCRINE PREPARATIONS

The following are a few of Brady & Martin's Branded
Preparations which have a large sale :—

HEPATISAL, KRITHOL
SEPTOPHON DUSTING POWDER
SEPTOPHON CREAM
ALVOLAX

PROMPT SERVICE : KEEN PRICES : SOUND QUALITY
offered to all

PHARMACISTS OF THE NORTH

VISITS AND ENQUIRIES INVITED : SPECIAL QUOTATIONS FOR QUANTITIES
SEASONABLE PACKED GOODS "OWN NAME"

Address all communications to :—

NORTHUMBERLAND ROAD
NEWCASTLE-on-TYNE

FREQUENT MOTOR VAN
DELIVERIES TO THE TYNE,
WEAR and TEES AREA.



Telegrams : " MARTIN "
Newcastle-on-Tyne.
Telephone : NEWCASTLE
24367 (2 lines).



ON SALE EARLY JULY • ORDER YOUR SUPPLIES NOW

Scientific Research
has produced

GLAND-ESTRIN

GLAND-ESTRIN BIOLOGICAL HAIR TONIC

Embodying an active principle which corrects the excessive secretion of pathological fat (to which hair poverty is recognised as being due) and restores the normal growth of the hair in absence of a Thyroid deficiency.

RETAIL 3/9 PER BOTTLE • WHOLESALE 30/- PER DOZEN

GLAND-ESTRIN BIOLOGICAL SKIN FOOD

Restores elements in the subcutaneous tissue, combats flaccidity and prevents atrophy.

RETAIL 3/3 PER JAR • WHOLESALE 26/- PER DOZEN

GLAND-ESTRIN VANISHING CREAM

A Vanishing Cream par excellence.

RETAIL 2/3 PER JAR • WHOLESALE 18/- PER DOZEN

GLAND-ESTRIN NUTRIENT FOOT CREAMS

A Foot Cream which combats fatigue directly by nourishing the tissues of the feet.

RETAIL 2/3 PER JAR • WHOLESALE 18/- PER DOZEN

GLAND-ESTRIN SHAMPOOS AND BRILLIANTINE

Shampoos in blue and gold containers.

RETAIL 3d. EACH • WHOLESALE 2/3 PER DOZEN

A TONIC BRILLIANTINE FOR DRY SCALPS

RETAIL 2/3 PER BOTTLE • WHOLESALE 18/- PER DOZEN

Attractively displayed and competitive in price, yet offering to the pharmacist a profit worthy of his position, "Gland-Estrin" Scientific Products are prepared under rigid Analytical Control at the Research Laboratories of

ANALYTICAL . CONSULTING &
MANUFACTURING CHEMISTS

MESSRS. J. CAMPBELL HARRY & CO.

CARDIFF AND ROTTERDAM HOLLAND



Our new home

at 11 & 12 Guilford St., W.C.1

from whence we shall continue our special service to the wholesale and retail trade, with additional facilities for the distribution of our own high-class pharmaceutical products and those of the well-known French Laboratories for which we are sole British agents.

ACECOLINE
 ADREPATINE
 ALLOCHRYSINE
 (Lumiere)
 AMBRINE
 BACTE-PHAGES
 BIOCHOLINE
 BIVATOL
 ELIXIR BROMO
 VALERIANATE
 (Gabail)
 EMGE (Lumiere)
 HYPOTENSYL
 IODASEPTINE
 (Cortial)
 IODOBESIN
 IODO-SCILLINE
 (Gabail)
 MYCOLACTINE
 ORARGOL
 PROLIFERASE
 SEPTICEMINE
 (Cortial)
 STANNOXYL
 SYRUP CREOSAL
 (Dubois)
 SYRUP PERTUSSIS
 (Gabail)
 TRINITRINE
 CAFEINEE
 (Dubois)
 ETC., ETC.

THE ANGLO-FRENCH DRUG CO. LTD

11 & 12 Guilford St., London, W.C.1

Telegrams : "Ampsalvas, London."

Telephone : HOLBORN 6011



It's your cash sales that bring down "overheads." Give "GRIPS" a chance. These world-famous pastilles are wanted all day, every day, and your till will feel the benefit.

A generous profit, continuous sales and satisfied customers are the reward of the chemist who stocks "GRIPS."

"GRIPS" national advertising and counter literature will link you up with success. Write for particulars.

*Distributors to the Wholesale and
Retail Chemist Trade:*

THOS. CHRISTY & CO.

4/12 Old Swan Lane
LONDON, E.C.4

"GRIPS" REGD.
FIRST-AID PASTILLES

Made by **LIGHTBOWNS, LTD.**, Accrington

LOZENGES PASTILLES

LIQUORICE & MENTHOL

Glossettes
REGD.

Compressed Tablets

PACKED OR IN BULK, FOR WHOLESALE,
RETAIL AND EXPORT TRADES

ERNEST JACKSON & Co., Ltd.

London Office: Plantain Place, Crosby Row, Boro', S.E.1

Works: **CREDITON**, Devon

Phone: Hop 2668 and Crediton 10.

**BLYTON, ASTLEY & CO.
LTD.**

**LOZENGES & PASTILLES
TABLETS & PILLS
PLASTERS
HEALTH
SALTS
&c.**

"Menthells" "Digestells"

WE INVITE CORRESPONDENCE

Eagle Laboratories
Lower Broughton, Manchester

Telegrams: "Troches, Manchester."
Telephone: B.L.A. 9848.

P.A.T.A. PRICES**DAISY POWDERS**

7½d. size (4 powders) 5/- per doz.

10½d. size (6 powders) 7/6 per doz.

2/9 size (20 powders) 23/- per doz.

Half Gross Boxes (72 powders).... 6/10 each

DAISY BRAND TABLETS

(Unstamped)

6d. size (under 1 dozen) 4/6 per doz.

6d. size (per complete dozen on
display rack) 4/- per doz.

1/3 size (36 Tablets) 10/- per doz.

Note.—Orders value £1 1 0 upwards for Powders
or Tablets (or Assorted) less 5% discount.

★ The above prices show remarkable profits, especially the one guinea parcel which gives retailers **58% PROFIT** on outlay with Daisy Tablets and small size Daisy Powders (sold intact), whilst the half gross box for split bulk shows retailers no less than **85% PROFIT** on cost.

MAKE UP A ONE GUINEA ORDER TO-DAY
AND SEND TO YOUR REGULAR
WHOLESALE OR DIRECT.

HEAVY NATIONAL ADVERTISING



HUGE PROFITS



**J. E. ELLIS, LTD.
HORSFORTH
LEEDS**

*The British remedy
for constipation*



In
*constant
demand*

PRUNOL JELLY
The great fruit remedy
9d., 1/6, 2/11 & 6/6

• PRUNOL PASTILLES •

PRUNOL PRODUCTS LIMITED, 21 COCKSPUR STREET, LONDON, S.W.1

REVISED PRICE LIST AND TERMS

CLARKE'S BLOOD MIXTURE

(LIQUID OR TABLETS)

3 dozen at 28/6 per dozen or £4/5/6 per case
12 dozen at 27/- per dozen or £16/4/- per case

CARRIAGE PAID. PACKING FREE.

ASSORTED ORDERS

		Min. Value £4/5/6	Min. Value £16/4/0
	Retail	per doz.	per doz.
CLARKE'S BLOOD MIXTURE ...	3/-	28/6	27/-
" " " " TABLETS ...	12/-	114/-	108/-
CLARKE'S SKIN LOTION ...	3/-	28/6	27/-
CLARKE'S MIRACULOUS SALVE ...	1/3	12/-	11/-
" " " " ...	1/3	12/-	11/-
" " " " ...	3/-	28/6	27/-
CLARKE'S APERIENT PILLS " ...	5/-	48/-	44/6
CLARKE'S APERIENT PILLS " ...	1/3	12/-	11/-
CLARKE'S MEDICATED SOAP, 3 Tab. Box } ...	3/-	28/6	27/-
Single Tab. } ...	2/6	8/-	7/6
	1/-		

Orders may be assorted as desired
at above rates; provided the mini-
mum values reach £4 5s. 6d. or
£16 4s. respectively.

**CARRIAGE PAID.
PACKING FREE.**

Terms :

Strictly Net. Monthly Account.

TRADE MARK "BLOOD MIXTURE" Reg. No. 3275
ORDER YOUR SUPPLIES NOW, EITHER DIRECT
OR THROUGH YOUR USUAL WHOLESALE HOUSE

THE LINCOLN AND MIDLAND COUNTIES DRUG CO., LTD., PARK ST., LINCOLN
Telegrams : "Lindum, Lincoln." Telephone : Lincoln 55.

BIG SUMMER ADVERTISING PUSH

FOR
'ASPRO'
OVER 300
NEWSPAPERS
ENGAGED



A TYPICAL 'ASPRO' WINDOW DISPLAY

Now is the time to put in your 'ASPRO' window displays. Our big summer advertising push for 'ASPRO' is on and over 300 newspapers are being used to broadcast 'ASPRO' healing message for sun glare headaches—hot weather sleeplessness—irritability—summer chills and ills and numerous other complaints for which 'ASPRO' has proved so valuable. Chemists at seaside resorts can obtain maximum sales of 'ASPRO' by showing 'ASPRO' window material continuously through the summer to connect up with the campaign.



THESE ARE OUR CHEMISTS'
ADVERTISING BAGS
AND ENVELOPES



Greaseproof
2 oz. Bags.

HAVE YOU OBTAINED A SUPPLY?

Kristal
Envelopes.

We have improved on our Kristal envelopes and greaseproof 2 oz. bags. Have you purchased your stocks yet? Specimens of the latest designs are enclosed in 'ASPRO' show boxes from time to time. We will send you specimens on request. You will be delighted. They save you money on your bags and at the same time create a demand for 'ASPRO'. Prices are

Kristal Envelopes - 2/6 per thousand

Greaseproof 2 oz. Bags - 1/- per thousand

AN ADDITIONAL CHARGE OF 2/6 PER THOUSAND IS MADE FOR KRISTAL ENVELOPES BEARING YOUR OWN NAME AND ADDRESS.

Do not forget too, to buy 'ASPRO' on bonus terms so that you will make the maximum profit.

'ASPRO' consists of the purest Acetylsalicylic Acid that has ever been known to Medical Science, and its claims are based on its superiority.

Agents: GOLLIN & CO. PTY. LTD. ('Aspro' Dept.), SLOUGH, BUCKS.
Telephone: SLOUGH 608

No proprietary right is claimed in the method of manufacture or the formula.

'ASPRO'
REG. TRADE MARK

Made by ASPRO LTD.,
SLOUGH, ENGLAND.

SEASONAL ADVERTISING FOR AN ALL THE YEAR ROUND SELLER

Summer months have brought no relaxation in the advertising of READE'S EXPRESS POWDERS, and sales are maintaining a steady seasonal increase all over the country.

Do not, therefore, let this easy, no-trouble and remunerative business slip through your fingers by not maintaining adequate stocks.

Made by
READE BROTHERS
& CO., LTD.,
WOLVERHAMPTON

LONDON DISTRIBUTORS:

MAY, ROBERTS & CO. LTD., 7-13 Clerkenwell Rd., E.C.1
SANGER & SONS, 42a Hampstead Road, London, N.W.1
BUTLER & CRISPE, 80/83 Clerkenwell Road, E.C.1



HOWARD LLOYD & CO., LTD.

Manufacturing Chemists, LEICESTER

Known all over the World for

PILLS, TABLETS, CAPSULES

OF THE

PUREST QUALITY AND HIGH CLASS FINISH

WRITE FOR SAMPLES AND QUOTATIONS

Specialists in

Private Formulæ made up.

PILLS AND TABLETS IN BULK

Special Formulæ problems a feature.

Wholesale only

40 years' practical experience in the Compressed Tablet and Pill Trade.

THE TOWER PILL & TABLET CO., LTD.

46 Penton Street, London, N.1

Telephone:
NORTH 0662.

GENASPRIN
THE SAFE
BRAND OF ASPIRIN

FORMAMINT
WULFING BRAND

SANATOGEN
THE TRUE TONIC FOOD

GENOZO
BRAND
TOOTHPASTE

Sure **SELLERS** *because they do all that's claimed for them*

These famous Genatosan lines are household words and are approved and prescribed by the medical profession. They need no pushing to sell — and sell *well*. All are chemist's lines, and each is supreme in its class. All offer you a big percentage of profit, particularly if you buy on direct cash terms. Extensive advertising throughout the year helps to keep the demand continually on the increase. And if you want to make a special window display, striking and up-to-date material can be obtained on request.

GENATOSAN

GENATOSAN LTD., LOUGHBOROUGH, LEICESTERSHIRE.

Telephone: Loughborough 292.

Telegrams: "Genatosan, Loughborough."



16 GLASSES OF GOOD HEALTHY BEER for 6d

CAN BE MADE WITH ONE 9d. BOTTLE OF

MASON'S EXTRACT OF HERBS

THE NATIONAL BEVERAGE

LIBERAL ALLOWANCE FOR
WINDOW DISPLAY



NEWBALL & MASON, LTD.
NOTTINGHAM.

APPLY AT ONCE FOR PARTICULARS

Sales of Roboleine will bring repeat sales and the thanks and goodwill of your customers

Roboleine

THE FOOD THAT BUILDS THE BODY

Sells all the year round and is worthy of prominence

PRICES

	Retail	Wholesale	
STANDARD SIZE	2/9	24/9 per doz. nett carr. paid on 2 doz.	
" "	"	24/- " " " " " 4 "	
FAMILY	12/6	112/6 " " " "	

OPPENHEIMER, SON & CO. Ltd. Handforth Laboratories, CLAPHAM ROAD LONDON, S.W.9

Products of — BENGER'S FOOD Ltd.

BENGER'S FOOD for INFANTS, INVALIDS and the AGED.

Has been used for over forty years with great success.

The "Lancet" describes it as "Mr. Benger's admirable preparation."

LIQUOR PEPTICUS (Benger).

An exceedingly active fluid pepsine. Dose, one or two teaspoonfuls with meals. In 4, 8 and 16 oz. bottles.

BENGER'S PEPTONISING POWDERS.

Half a powder will peptonise a pint of milk, gruel, beef tea, etc., in a few minutes. In boxes of 6 and 12 powders.

BENGER'S PEPTONISED BEEF AND CHICKEN JELLIES.

Nutritive delicacies for Invalids. In glass jars.

LIQUOR PANCREATICUS (Benger).

Containing all the active principles of the fresh pancreas. Used to prepare peptonised or partially digested milk and other articles of food.

BENGER'S PANCREATISED LENTIL FLOUR.

Can be used in the same way as Benger's Food, for which it may be substituted when a change of diet is desirable.

BENGER'S ESSENCE OF RENNET (Curdling Fluid).

The highest quality sweet essence, which can be safely used for obtaining whey for professional use in Infant and Invalid Feeding. Makes excellent Junket. In bottles of various sizes.

PEPSIN PILLS (Benger).

Represent the active principle of the Liquor Pepticus in the form of tasteless coated pills in convenient and effectual form. In bottles of various sizes.

PANCREATIN PILLS (Benger).

Contain the purified digestive principles of the fresh Pancreas, and are coated with Keratin to protect them from the solvent action of the gastric juice, until they reach the duodenum, where they will rapidly dissolve. In bottles.

EXTRACT OF RED MARROW.

An agent capable of affording valuable aid in the treatment of Anæmia, and also of Oligæmia due to loss of blood.

LIQUOR THYROIDIN.

A glycerine and water extract of selected fresh Thyroid glands obtained from healthy sheep.

'EXTOMAK'

(Trade Mark)

An active and natural desiccated stomach product, preferable in all respects to Liver Extracts—see the "British Medical Journal" dated 8th February, 1930.

Supplied in 1-lb. tins.

Of all Wholesale Houses and Shippers, or from the Manufacturers,

BENGER'S FOOD LTD., Otter Works, MANCHESTER

NEW YORK, U.S.A. 41 Maiden Lane. SYDNEY, N.S.W. 350 George Street.

CAPE TOWN, S.A. P.O. Box 573.





A brisk Beer Trade without beer trade troubles

Here's how to secure the profits from beer business without any of its labour or losses . . . without delivering crates or collecting bottles, without breakages, ullages or stock complications. Sell

VIGGORMALT The MONEY MAKER

PURE EXTRACT OF MALT & HOPS ONLY

You cannot please your customers better. Viggormalt is a concentrated pure extract of Malt and Hops only and makes genuine "Oambroo" Beer (ALE or STOUT) of true Old-English character quite simply (*The Daily Express* says so, 9-5-32), at the amazingly low cost of 1d. a pint. Once introduced it quickly becomes a regular item on the shopping list. National advertising is extensive and constant. Demand is growing. Start now to share the profits.

**NO
MILLING
MASHING
BOILING or
FILTERING**

**FREE YEAST
with each tin**

DISTRIBUTORS:

FASSETT & JOHNSON, LTD.
86 Clerkenwell Road, London, E.C.1

Sole Manufacturers:

VIGGORMALT Ltd., Davigdor Rd., Hove, Sussex

SPECIAL B.P.

CADIZ SHERRY

Full duty, shipped expressly from our Spanish House for Chemists' use in B.P. Preparations by

LAMB & WATT, Limited

Established 1847

46/48 St. Anne Street

LIVERPOOL

who also specially manufacture

**B.P. ORANGE WINE,
"WIN FERRO" TONIC BLOOD WINE,
"CROWN" Brand LIEBIG'S MEAT AND
MALT WINE, BROADWAY COCKTAIL.**

Green Ginger, Raisin, Cowslip, Elderberry, etc., made only from the fresh fruit. Purity fully guaranteed. Highest Awards at all Exhibitions where shown.

Full Strength **AUSTRALIAN RED,
TAWNY AND WHITE WINES,
AUSTRALIAN SHERRY** and
every kind of foreign wine.

DUMAS ★★★ BRANDY—DOURADOS PORTS

WRITE FOR PRICES AND SAMPLES

DIABETIC AND OBESITY FOODS

**PALATABLE
STARCHLESS
SUGARLESS**

Prescribed by the Medical Profession everywhere

**CALLARD & Co. - Food -
Specialists**

(CALLARD, STEWART & WATT, Ltd.)

Standen Rd., Southfields, London, S.W.18

WEST END DEPOT
74 Regent Street, London, W.1



100 Years Old

and still as "vigorous"
as ever

THIS year we celebrate our centenary—a hundred years of service to all our customers throughout the world. During this period "JOHN BULL" MALT SPECIALITIES have acquired a reputation second to none for quality and regularity.

The secret of their remarkable success is to be found in the splendid organisation at our command, an organisation which covers every process of manufacture from the delivery of the raw grain to the packing of the finished article, an organisation embracing extensive Maltings, Factories and Laboratories well equipped with the latest scientific plant.



"JOHN BULL" MALT SPECIALITIES

MALT EXTRACT.

VITAMIN MALT.

MALT & COD LIVER OIL

PAINE & CO. LTD., ST. NEOTS, HUNTS

WHOLESALE & EXPORT ONLY



AZYMA

CACHETS

FRENCH, MORSTADT,
and the new DRY CLOSING
Special quotations for quantities and for printing

Write for Samples to:
CICERO S. CLARK, Sole Agent,
12 RICHMOND ROAD, W.2

3/3 per 1,000

ALL SIZES

(Carr. paid on 4,000)

Revised Edition—Greatly Enlarged INCOMPATIBILITY IN PRESCRIPTIONS

with a Dictionary of Incompatibilities.

By **THOMAS STEPHENSON, D.Sc., Ph.C., F.R.S.E.**

Cloth, 6s., 6d., by post, 4s., 9d.

Through any Medical Bookseller, or direct from:—

"THE PRESCRIBER" Offices, 13 Glencairn Crescent, Edinburgh. 12.

PURE ORANGE WINE A. MILLAR & CO., LTD., DUBLIN

(VINUM AURANTII B.P.)

Prepared in strict accordance with the Formula of the British Pharmacopoeia.

(Wholesale only.)

Samples from Head Office, Thomas Street, DUBLIN, or London Office, 74 Great Tower Street, LONDON, E.C.3

ESTABLISHED 1793.

The Best and
Safest Infants'
Medicine of
over 130 years'
standing.

ATKINSON & BARKER'S
INFANTS' PRESERVATIVE

Does not
contain
any
Scheduled
Poison.

ROBERT BARKER & SON, LTD., 13 WESLEY STREET, C. on M., MANCHESTER

RAYEAST

**Retails at
1/3 per bottle**

Write for Sample

*Overseas
enquiries invited*

THE ALL-VITAMIN FOOD

CONTAINS ONLY

VITAMIN "B"

in the form of Pure,
Dried Yeast with
activity retained and

VITAMIN "D"

—Irradiated Ergosterol

RAYEAST LTD. - - PENISTONE, YORKS.



PRESS COMMENT EXTRACTS
of the LONDON CHEMISTS'
— EXHIBITION —

The Times : . . . A third exhibit consists exclusively of chemists' confectionery in prismatic hues. The chemists claim that the sweets are not only toothsome but are good for you. The ingredient that achieves this desirable result is the kind of

sugar called
glucose or
dextrose

which doctors recommend. It enters into the composition of all the sweets in the exhibition such as Vitamin Malt Toffee, Invalid Butter, Barley Sugar Sticks, Lemon, Grape Fruit, Orange, Lime Juice, Loganberry, Peppermint Creams . . . etc., etc.

The Daily Mirror : . . . EVERY bottle was entitled to its place in the Hall of Medicine, for none of these sweets could be bought anywhere but in a chemist's shop . . . etc., etc.

WRITE FOR PRICE LIST AND CATALOGUE.

A. L. SIMPKIN & CO., LTD.
CHEMISTS' CONFECTIONERY WORKS

**SEDAN STREET
SHEFFIELD**

London **11 CREECHURCH LANE**
Buyers to **LONDON, E.C.3**





A century of Progress

C. J. HEWLETT & SON, LTD. LONDON, E.C.2



SUNDRIES SHOWROOM



EXPORT PACKING



PILL & TABLET ROOM



100 YEARS

THE centenary of C. J. Hewlett & Son, Ltd., has been the subject of recent articles in the pharmaceutical Press and of a brochure in which the history of the business has been set forth in detail. From whatever point of view regarded, it is a remarkable record of progress achieved, in the only sound way, by knowledgeable planning and hard work. Charles James Hewlett, the founder, established himself in Lambeth Hill, London, in 1832, and six years later introduced the first printed price-list used in the wholesale drug trade. A practical pharmacist as well as a keen business man, he anticipated the needs of his customers and provided for the time when the direction of affairs would pass into other hands. Changes of partnership were few — from Hewlett & Goddard to Hewlett & Taylor, and then, in 1870, to C. J. Hewlett & Son. The present extensive premises were opened in 1880, and have since been carried through from Charlotte Street to Curtain Road. A few years before Mr. Charles Hewlett's death he handed over the control of the firm to his son, Mr. John C. Hewlett, M.P.S., F.C.S.;



TINCTURE LABORATORY

with the HOUSE OF HEWLETT

a further stage in the evolution of the House of Hewlett came in 1908, when a private limited company was formed under Mr. John C. Hewlett's chairmanship, with Mr. Edgar J. Millard, Ph.C. (managing director), Mr. Vivian C. Hewlett, Ph.C., and Mr. J. D. Allman, M.P.S., as his co-directors. On the death of the chairman in 1924 Mr. Vivian C. Hewlett succeeded him at the head of the directorate, and recently Mr. Norman P. Millard, son of the managing director, has been elected to the board.

In Mr. John C. Hewlett's time began a new era of expansion, brought about largely through his personality and his cultivation, in numerous tours, of overseas trade. The "Owl" trade mark was registered in 1884, in which year also the titles "Mist. Pepsinæ Co. c. Bismutho" and "Liq. Santal Flav. cum Buchu et Cubebâ" obtained registration, with proof of use since 1875. Mr. Hewlett made these and other specialities of the firm known in Canada, South Africa, Australia, New Zealand, India, China and, indeed, practically every part of the world. Among the other pharmaceutical products thus introduced to an ever-widening circle of pharmacists and medical men were Mist. Damianæ Co., Mist. Tussi Rub. Conc., Hepatagen, Veronigen, Iodermiol, Antiseptic Cream and many other distinctive and elegant preparations.

Particular interest attaches to the analytical laboratory, as it was in this department 40 years ago that Messrs. Hewlett & Son introduced the principle of standardisation of preparations in advance of the requirements of the B.P.

The introduction of standardised tinctures and fluid extracts, followed by physiologically tested preparations, led to an enormous increase in the export trade and necessitated the construction of new buildings in order to cope with it.

One indication of this world-wide export trade is that in the printing department at Charlotte

Street, where a great part of the requirements of this kind are met, may be seen labels and circulars in the principal foreign languages, and even in the less-known Hindustani, Cingalese, Burmese and Chinese.

Developments have continued until the business has become to a large extent self-contained, even packing cases being made on the premises. The first floor of the Curtain Road building is chiefly devoted to druggists' sundries, and especially to those lines with which the name of Hewlett is closely associated. It now includes, as a recent addition, a section assigned to a complete range of trusses, with ample provision for fitting. On the same floor is the handsome board room, fitted in oak. The upper floors have each an area of 2,250 square feet. The second floor contains the stock room for sundries. The third is devoted to packed drugs. The fourth comprises two powder rooms, one for medicinal products and the other for toilet articles. On this floor, too, is the aseptic room, equipped on the most modern principles for sterilizing bandages and for the preparation, under stringent conditions, of "Ampuliques"; this room has neither corners nor crevices, and the air is filtered so as to become germ-free before entering it.

Many other features of the works and offices might be mentioned as conducing to the result desired by the directors and their capable staff, a result the chief factor in which, while modern machinery counts for something, is the spirit of efficiency and of service that animates the organisation. Messrs. Hewlett & Son have for many years been contractors to H.M. Government; they supply drugs and druggists' sundries to the Ministry of Agriculture and Fisheries, the Prison Commissioners, the Crown Agents for the Colonies, hospitals and institutions under the London County Council and the Middlesex County Council, and many other hospitals at home and abroad.



ORIGINAL PREPARATIONS

bearing the Hewlett

Seal of Quality



C. J. HEWLETT & SON, LTD.

Wholesale Druggists and Manufacturing Chemists

35 - 42 CHARLOTTE STREET, LONDON, E.C. 2



WORTHY OF WINDOW SPACE!

THIS attractive sales-compelling display showcard measures 20" x 30". Its bright, sunny colouring and lifelike representation of a harvesting scene cannot fail to attract attention to your window. Your shop window is essentially your salesman and a showcard that will "tell and sell" is worthy of window space. We give one of these entirely free with new or renewed contract orders placed with us for our renowned

"HARVESTER" MALT EXTRACT AND COD LIVER OIL.

A preparation of the highest quality, made from the purest of Norwegian steam refined Cod Liver Oil and the finest selected Barley. Rich in digestive properties, food values and active vitamins essential to body building. A ready seller which has gained public confidence and ensured good repeat business.

- Write to us NOW. Full contract terms and particulars, together with a sample jar of "HARVESTER," will be sent to you free and entirely without obligation.

A. de St. DALMAS & Co. Ltd
LEICESTER

ALSO AT

DUBLIN, LONDON, LEEDS & BRADFORD

TELEPHONE: LEICESTER 58246 | TELEGRAMS: "ST. DALMAS" LEICESTER

W. B. DICK

**26
GROSVENOR
GARDENS
LONDON
S.W. 1.**

BY APPOINTMENT TO
H.M. THE KING



PARAFFINUM LIQUIDUM B.P.

*All Specific Gravities Guaranteed
to remain bright at 0°C*

B.P. WHITE & YELLOW PETROLEUM JELLIES

WHITE & HALF WHITE OILS

METHYLATED SPIRITS *and* FINISH

FINEST OBTAINABLE
PROMPT DELIVERIES



J. M. Mills Ltd.

**BROOKFIELD DISTILLERY
STOCKPORT**

*Telephone: Stockport 2396
Telegrams: "Phone, Aniline"*

*Bleached
White
B.P.*

BEESWAX

*Refined
Yellow
B.P.*

POTH, HILLE & CO., LTD.

6 Lloyd's Avenue, London, E.C.3.

Works at Stratford, E.

CONTRACTS 1932 - 33

QUALITY, SERVICE & SATISFACTION

BUTTERSCOTCH
Brand**MALT EXTRACT**
MALT EXTRACT WITH COD LIVER OILFor Supply to—
CHEMISTS, DRUGGISTS, CLINICS,
HOSPITALS, INSTITUTIONS, ETC.

IN BULK OR PACKED HOME & EXPORT WHOLESALE & RETAIL

C. TOLKIEN & CO. LTD.**MALT EXTRACT WORKS
SILSDEN, Yorkshire**

Telephone: STEETON 69 Telegrams: REMOGEN, PHONE, STEETON

London Address: 461a CALEDONIAN ROAD, N.7 'Phone North 5047

A large selection of attractive "own name" labels is available. Liberal display material supplied with all orders. Also price tickets, etc.

LUCOZADE

Regd. Trade Mark

**NUTRIENT FOOD
BEVERAGE**

Is the solution to the problem of administration of medicinal glucose in a pleasant and readily assimilated form. Introduced and manufactured by— Intensive medical propaganda now in progress.

W. OWEN & SON, Manufacturing Chemists, 151 BARRAS BRIDGE, NEWCASTLE-ON-TYNE
Est. 1847 who will be pleased to send full particulars to all enquirers.

**WHOLESALE
PLEASE NOTE**

Attractive sole agency terms can be secured in many districts for Hobson's Black Beer (non-intoxicating), "Danzovin" Tonic Wine, etc. These lines are consistently advertised to the public. There is a good demand. Own name literature supplied.

Write us for agency terms.

JOSEPH HOBSON & SON, Ltd., Regent St., LEEDS
'Phone: LEEDS 25270 Telegrams: "SPRUCE," Leeds

"VITAMIN TESTED YEAST"

Yeast specially prepared for medicinal purposes.

GUARANTEED ABSOLUTELY PURE.
MIDGLEY & PARKINSON, LTD.
WARREN WORKS, PUDSEY, LEEDS.

Season— 1932

COD LIVER OIL

GUARANTEED GENUINE. FINEST PURE LOFOTEN.

Manufacturers:

BRÖDR. AARSÆTHER A/S, Aalesund, Norway.

LARGEST MANUFACTURERS OF COD LIVER OIL IN NORWAY.

SPECIALITY—Pure Veterinary Cod-Liver Oil.

Stocks always held in London.

In 25-gallon tin-lined barrels.

**SOLE AGENTS
FOR U.K.:****FREUDENTHEIL, SMITH & CO.**

Tel. Add.: "FREUDENRUF." 21 Mincing Lane, LONDON, E.C.3. Tel.: ROYAL 6500.

Codes used: A B C, 4th and 5th Edit., Bentley's, and Private.



PURE RUSSIAN LIQUID PARAFFIN MEDICINAL B.P.

ALL GRAVITIES.

HIGHEST VISCOSITY.

PURE RUSSIAN "JASMINE" BRAND WHITE OILS

CHEMICALLY PURE.

WATER WHITE.

ODOURLESS.

FOR MANUFACTURING PURPOSES.

*Competitive Prices.**Best Quality.**Immediate Delivery.*

THE PURE RUSSIAN LIQUID PARAFFIN CO., LTD.

80 BISHOPSGATE, LONDON, E.C.2

Telephone: LONDON WALL 7132-7133.

Telegrams: "INVATORE, STOCK."

PETROLEUM JELLY
("SALVO PETROLIA")
BRAND

THE PERFECTION OF PETROLEUM JELLY
MANUFACTURED SOLELY BY

THE DEE OIL CO. LD

23 & 24 EXCHANGE BUILDINGS
LIVERPOOL

TELEPHONE: CENTRAL 3859 TELEGRAMS: "CESTRIAN"

LONDON OFFICE
11 POULTRY, CHEAPSIDE, E.C.2. PHONE: CITY 8455

PACKED IN BARRELS, KEGS OR
SMALLER PACKAGES IF DESIRED.

OTHER GRADES OF
PETROLEUM JELLIES, WHITE BASES ETC.
WHITE OILS B.P. & Technical Qualities
SAMPLES & PRICES ON APPLICATION

OLEUM DEELINÆ (DEE OIL)
THE UNFAILING CURE FOR ECZEMA.

Paraffinum Liquidum B.P.

ALL GRADES
SAMPLES & PRICES

On application to —

STERNS LTD

16 Finsbury Square London E.C.2

WHOLESALE ONLY

HIGHEST
QUALITY

HIGHEST
VISCOSITY

LIQUID PARAFFIN B.P.

ALSO

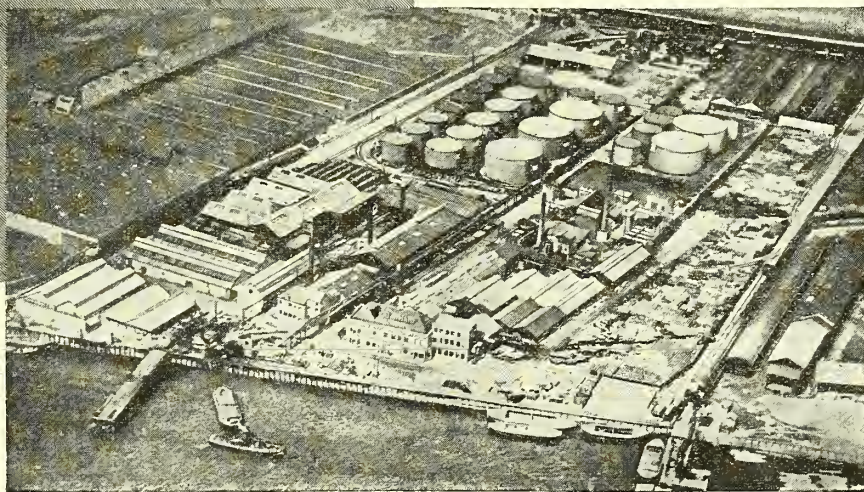
TECHNICAL WHITE

AND

HALF WHITE OILS

PETROLEUM JELLIES

ETC.



VIEW OF SILVERTOWN WORKS, LONDON, E.16

Silvertown Lubricants Limited

WHITE OILS DEPARTMENT

MINOCO WHARF, WEST SILVERTOWN

LONDON, E.16

Tel. : ALBERT DOCK 1074
(5 lines)

*Grams : VOLUMETRIC,
SILVER

"SURCO"

RELIABLE

ELASTIC HOSIERY

SEAMED & SEAMLESS

For special garments
to measure we maintain
a 24-hour service.

:: BODY BELTS ::
TRUSSES :: SUNDRIES

Write for Catalogue.

SURGICAL HOSIERY CO., LTD.

Russell Street :: NOTTINGHAM
Telephone. Telegrams :
No, 75903, "Surgical, Nottm."

To BUYERS of TRUSSES!

The most complete up-to-date facilities for the manufacture of **RUPTURE APPLIANCES** of every known English and American pattern are operating at

**BLACK BULL WORKS,
MARKET ROAD, LONDON, N.7**

Hard Rubber, Celluloid, Leather and Mole
Covered and Elastic Band Trusses, under the

"MASTER"
BRAND
TRADE MARK



are sold in all
Markets of the
World.

"KO-RALLIUM." A new flexible covering for Steel Springs, is immune from Warping, Cracking, Shrinking or Peeling, Non-Inflammable, Impervious to Moisture, Neutral to URIC ACID Secretions. Supersedes Hard Rubber or Celluloid.

Get to know of this. It is **Something Different!**

Suspensory Bandages and Jock Straps

We offer distinctive lines of outstanding value. Our weaving sheds allow of all intermediate profits being passed to our customers.

Write for sample range at Special Rate, then compare.

F. SCHUTZE & CO., LTD.

Black Bull Works, Market Road, London, N.7

"MOSANS"

Non-Greasy, Odourless

QUININE PESSARIES



15/-
per dozen
boxes
RETAIL
3/6

ORDER THROUGH ANY WHOLESALER.

Avoid Imitations and see the No. 332117 on each box.

SPECIAL BONUS

UNTIL JUNE 30TH

14-TO-THE-DOZEN ON

D^R. SCHOLL'S KOOL-FOOT Arch Rest

Dr. Scholl's KOOL-FOOT Arch Rest—Impregnated with BORACIC—is soothing, cooling, refreshing and restful for tired, hot, aching feet.

Dr. Scholl's KOOL-FOOT Arch Rest is *not* an insole—it is much more. An accurately shaped resilient pad gives mild support to the instep arch.

Dr. Scholl's KOOL-FOOT Arch Rest is a proved seller for summer weather. Invaluable for tennis players, hikers and all whose feet tend to excessive perspiration.

Dr. Scholl's KOOL-FOOT Arch Rest at 12/- per dozen—retailing at 1/6 per pair—show a good profit. At 14-to-the-dozen there's an *extra* 3/- clear profit. Order from your Wholesaler now.

**"SCHOLL" Advertising
is CONTINUOUS**

INGRAM'S "AGRIPPA" TEATS

4

POPULAR
SHAPES NOW
AVAILABLE
IN CARTONS

Packed one dozen in an
attractive display box

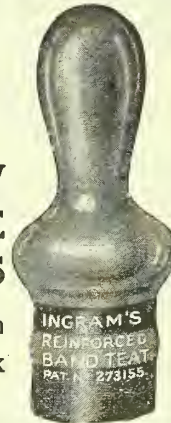
ON THE P.A.T.A.



No. 1
INGRAM'S
"AGRIPPA"



No. 2
INGRAM'S
"CHERRY-TOP"



No. 3
INGRAM'S
"BULB-TOP"



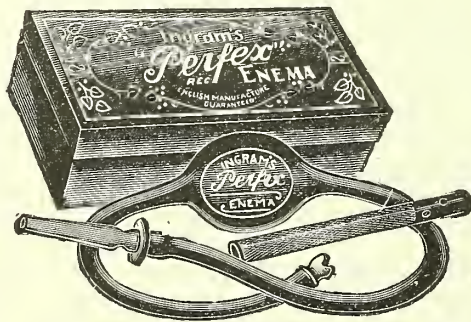
No. 4
INGRAM'S
"BALL-TOP"

THE TEAT WITH THE GREEN BAND

INGRAM'S SEAMLESS ENEMAS

TWO OF THE WELL KNOWN SERIES OF INGRAM'S ENEMAS

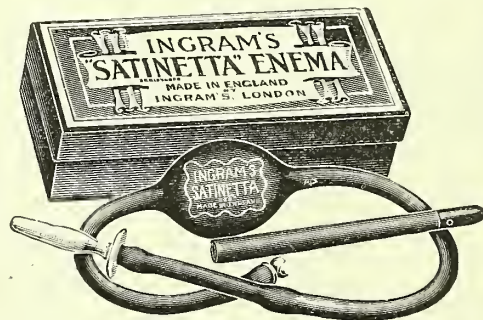
"The Perfex"



A RELIABLE QUALITY SEAMLESS
ENEMA. Ordinary Bulb

Fitted complete with Bone Rectum and Rubber Vagina
Pipe and Leather Shield in an attractive Card Box,
Labelled. On the P.A.T.A.

"The Satinetta"



Ordinary Bulb. Made in a pleasing
"Crimson-Satin" Finish

Fitted with Bone Rectum Pipe, Vagina Pipe and Shield.
Complete in box. On the P.A.T.A.

The complete series of Ingram's P.A.T.A. Enemas include
"Adaptable," "Atalanta," "Eclipse," "Herelendum," "Utilema," "Zebina," "Zenith."
OBTAINABLE FROM ALL WHOLESALE HOUSES

J. G. INGRAM & SON, LTD.

The London India Rubber Works

HACKNEY WICK - - LONDON, E.9

Camelia



Perfected
Soluble Sanitary Towels

**MADE IN
BRITAIN**

'All-out' Summer Campaign
for Turnover of

£3,000,000

National Advertising
commences end of June

FULL PAGES and other large spaces in journals
read by more than 5,000,000 women.

Bonus of over 14%
extra Profit

An order placed for delivery before July 20 will
entitle you to receive this Bonus ON ALL ORDERS
for delivery before AUGUST 31, 1932.

*For the fourth
year in succession
"CAMELIA"
has been awarded
the Certificate of the
Institute of Hygiene,
London*

**Cash Awards for Window
Displays by Pharmacists**

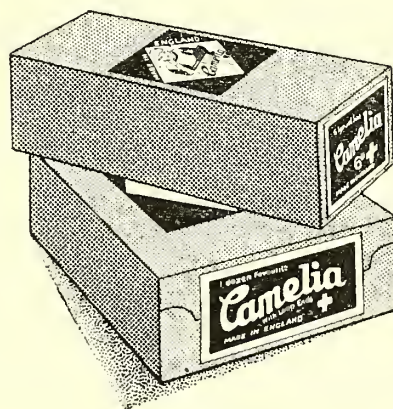
£100, £50, £25, & 25 of £1 each

These awards are for pharmacists only. Other distributors of "Camelia" will receive similar but separate awards.

Full particulars have been posted

to all Pharmacists. If you have not received your copy of the circular please apply to your usual wholesaler or direct to

"CAMELIA" SALES DEPT.
136, 137 LONDON WALL, E.C.2





NORVIC

BLUE CARTON CRÊPE BANDAGES AND BINDERS

A SMALL DISPLAY WILL INCREASE YOUR SALES CONSIDERABLY

Well advertised and highly recommended by the Medical and Nursing Professions. Special weave ensures exceptional elasticity. 70% wool quality and fully guaranteed. Neatly packed in the distinctive blue carton.

P.A.T.A. PRICES.

BANDAGES.	2"	2½"	3"	3½"	4"
Cost - - -	12/-	15/3	18/3	21/3	24/3 doz.
Sell - - -	1/6	1/11	2/3	2/8	3/- each.
BINDERS.	6"	8"	11"		
Cost - - -	36/6	48/6	66/6		66/6 doz.
Sell - - -	4/6	6/-	8/3		8/3 each.



Order this attractive display box (Cost 12/-) containing a handy assortment of most useful sizes and ask for copy of "VIC" Instructional Chart in showcard form.

P.A.T.A. PRICES.

	2½"	3"	3½"	
Cost - -	10/-	12/-	14/-	doz.
Sell - -	1/3	1/6	1/9	each.

VIC SPORTS CRÊPE BANDAGES

An entirely new line which appeals to every sportsman and sports-woman. Hygienic, rubberless, it remains in position and is comfortable to wear. Well advertised in every sports club in the country, it is rapidly displacing other methods of support.

VIC TONIC FLESH - CLOTH



Entirely different from an ordinary washing square, it is a FRICTION cloth which never gets slimy and has a tonic action on the skin ensuring health and beauty.

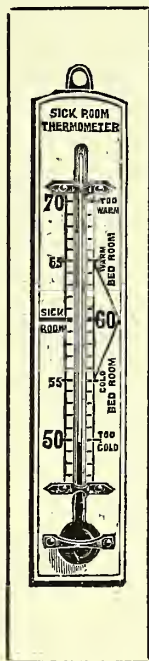
P.A.T.A. PRICES.

	Cost	Sell
Hand Size - - - -	6/- doz.	9d. each,
Bath Size - - - -	10/- doz.	1/3 each.

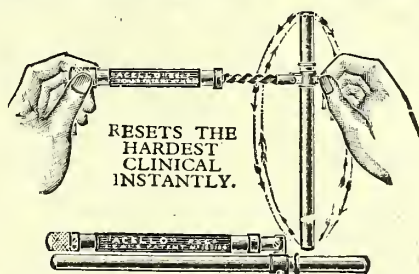
Stocked by all the leading wholesalers.
Attractive showcards free on request.

ZEAL'S GUARANTEED CLINICAL, HOUSEHOLD AND INDUSTRIAL THERMOMETERS

Zeal's
Magnifying
Thermometer,
with Index Guide
for Easy Reading.

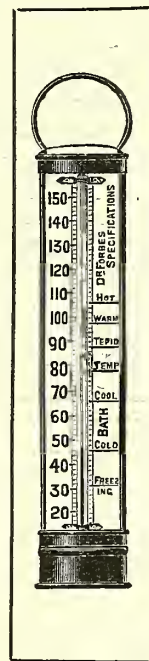


No. 222.
Boxwood
Sick Room
Thermometer.



"ACELLO"
RESETTING CASE.

Zeal's
Non-
Magnify-
ing Thermo-
meter, suitable
for Hospitals
and Institutions.



No. 234.
Bath Thermo-
meter, Metal
Scale and Case.

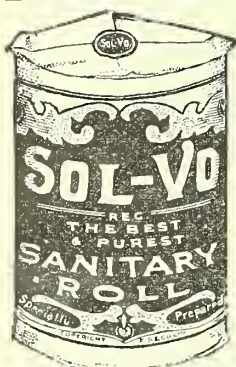
The world can offer nothing finer than Zeal's Clinical Thermometers, and the prices are no higher than those of the nondescript makes.

Similarly, the Household, Bath, Sick Room, Laboratory and Works Thermometers are all the best of their kind, and are not only guaranteed to be accurate when sold, but guaranteed to remain permanently accurate.

G. H. ZEAL LTD. 75-77 St. JOHN St.
LONDON, E.C.1.

Works: 29 St. John's Lane, E.C.1.

Telephone: Clerkenwell 9658/9



SOL-VO REGD TOILET PAPER

PURE - SOFT - HYGIENIC
(Completely Wrapped)

SELLING AIDS.

A display Showcard and "Personal Hygiene" leaflets with every order.

750 perforations to every roll.

A P.A.T.A. line retailing at 9d. each.

No dirty edges, completely wrapped and sealed.

3 Doz. @ 6/- Doz. 6 Doz. @ 5/9 Doz. 12 Doz. @ 5/3 Doz.

CARRIAGE PAID-NET.



FORD, SHAPLAND & CO. LTD.

PRINTERS & WHOLESALE STATIONERS,

GREAT TURNSTILE, HIGH HOLBORN, LONDON, W.C.1

J. H. HAYWOOD, Ltd. CASTLE GATE NOTTINGHAM

Tele.: "Appliance Nottingham." Established 1833. Telephone: 40488 Nottm.

SURGICAL APPLIANCE MANUFACTURERS.

SPECIALITIES FOR SUMMER.

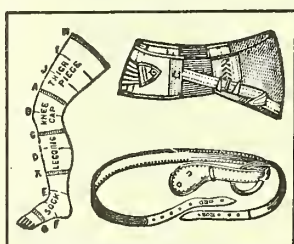
Elastic Hosiery, with or without seams, suitable for Summer wear.

Trusses, Spring and Elastic, Suspensory Bandages, Abdominal Belts, made from porous materials.

Elastic and Leather Supports, for Cricket, Tennis, Golf and Boating.

Goods for Toilet and Seaside trade.

India Rubber Appliances, Nursing Requisites, Druggists' Sundries, etc.



VENUS
OWL
GODIVA
&
BALLOON
BRANDS.
PESSARIES,
HOT
WATER
BOTTLES,
URINALS.

SURGICAL RUBBER GOODS

NOTICE.—Several instances of the sale of VENUS BRAND goods other than their make having been brought to the notice of Joseph Harris & Co., their Solicitors are instructed to take proceedings against anyone (Makers or Vendors) fraudulently using the name or design of VENUS or any imitation thereof in connection with Seamless Moulded Goods.

ADVERTISING BALLOONS

Actual Makers of this effective form of advertising. Special Designs submitted.

SQUEAKERS, DYING BOARDS, SWANS, BIRDS, ELEPHANTS, &c.

Wholesale & Export only

Joseph Harris & Co., Rubber Works, Broadheath, Altrincham

EADE'S CELEBRATED RHEUMATIC PILLS

famous for
86 years



still

in public favour

— Eade's Pills retail
— at 1/3 and 3/-
— Other specialities
— & sales literature
— may be had on
— application

**Backed by National Press
Advertising, sales continue
to rise. Stock up now and
get your share of the profits**

Write for Attractive Counter Wrappers on which we will print Your Name and Address.

GEORGE EADE LTD.

GOSWELL ROAD, LONDON, E.C.1



Regd. Trade Mark

FOR
HAIR LOSS
Falling Hair
Dandruff

KOTALKO
TRUE HAIR GROWER

The Public is asking for
KOTALKO 5/- per box, 45/- per doz.
" 12/6 (Triple) 112/6 "
KOTALKO SOAP
1/6 tablet, 13/6 "
P. A. T. A. Prices.

JOHN HART BRITAIN, Ltd.
2 PERCY STREET, LONDON, W.1.

Dr. N. TUCKER'S
ASTHMA REMEDY
(The original preparation containing Cocaine)
and
BRONCHASMIN
(not containing Cocaine)
for **ASTHMA, Etc.**

TUCKER'S
SPECIAL ATOMIZERS
Now British Made at Reduced Prices
Trade Terms on Application

Sole Proprietors:
A. Q. TUCKER & Co., Ltd.
CHEMISTS
491 OXFORD STREET, W.1.

Elasto
Regd

*For all Diseases
of the Circulatory System*

Recommend "ELASTO" for Varicose Veins, Ulcers, Eczema, Swollen Legs, Phlebitis, Thrombosis, Muscular Weakness, Bad Legs, Piles, Prolapsus, Varicocele, Hardened Arteries, Blood Pressure, Deficient Circulation and kindred ailments.

*Elasto may be relied upon to
give satisfaction. The existing
urgent demand is being steadily
fostered by consistent advertising*
WHY NOT SHOW ELASTO?

Prepared in the Laboratories of
THE NEW ERA TREATMENT CO. LTD.
CECIL HOUSE - HOLBORN VIADUCT
LONDON, E.C.

Full particulars, Showcards, and Leaflets on request.



Elasto
Tablets
5/- a box
(One month's supply)

Wholesale
45/- a doz.

Elasto
Nature
Salve

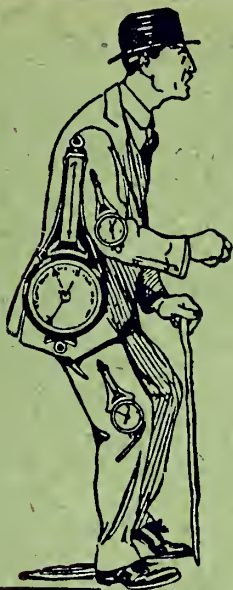
3/- a box

Wholesale
27/- a doz.



P.A.T.A.

From your wholesaler



Generous margin Well advertised Endorsed by Doctors **CURICONES!**

Scores of letters from doctors, chemists and distinguished people in every walk of life prove the reliability of CURICONES as a treatment for rheumatoid arthritis, neuritis, sciatica, gout, lumbago and kindred complaints. No other remedy can show such convincing evidence of tried and tested worth. Furthermore,

CURICONES are heavily and consistently advertised. Take into account also the generous margin of profit and you will know why they are "starred" by most chemists and featured prominently in the showcase and window display.

WINDOW DISPLAYS

Help us to help you by displaying CURICONES in your window. Write for particulars of Cash Bonus for Window Display.

Stocked by all
Wholesale Houses

CURICONES *made by* **STEPHEN MATTHEWS & CO., LTD.**

Manufacturing Chemists and Druggists,

19-21, FARRINGTON STREET, LONDON, E.C.4

Telephone: CITY 8342.

Telegrams: "CURICONES, CENT, LONDON."



RANKIN'S HEAD OINTMENT

Sales restricted to Chemists
only. Not a Part I Poison.

On P.A.T.A.

Write for terms to the Manufacturers:

RANKIN & CO.
EAST GEORGE STREET, KILMARNOCK
SCOTLAND
Established 1798

GOOD SALES! GOOD PROFITS P.A.T.A. LINES

Steady, all-the-year-round sales—repeats—recommendations—these you always get with Marie Antoinette Products. They do all that is claimed for them—that is the reason. Sold at a fair price with a fair profit to the Chemist.

MORGAN'S POMADE

A genuine, old-established preparation for restoring grey and faded hair to its natural colour. Not a dye. Rids the scalp of dandruff and promotes healthy growth. Sells at 1/9 and 3/3 per jar.

MARIE ANTOINETTE EGG JULEP SHAMPOO POWDER

The original Egg Julep Shampoo. Promotes healthy, vigorous growth, acts as a valuable disinfectant and removes all dandruff. Harmless in use. Recommended for children's heads. Sells at 3d. each or 1/6 per box of seven.

MARIE ANTOINETTE VANISHING CREAM

A splendid Beauty Cream for day use. Softens, smoothes and soothes the skin and prevents redness, roughness and blemishes. Forms an ideal base for powder. Sells at 1/6 per jar. Trial size tin 3d.

The MARIE ANTOINETTE CO. LTD.
149, JUNCTION ROAD, LONDON, N. 19

For DISTEMPER, JAUNDICE,
DESTROYING WORMS, ETC.

BENBOW'S DOG MIXTURE

WILL BE FOUND INVALUABLE.

It is also a "Pick-me-up" for
all dogs when out of condition.
IN BOTTLES AND CAPSULES
also $\frac{1}{2}$ -gall. and 1-gall. cans.

BENBOW'S DOG SOAP

FOR CLEANING THE COAT
AND DESTROYING INSECTS

Can be obtained from your Wholesaler.

Sole Proprietors:

BENBOW'S DOG MIXTURE CO.
2 BARTHOLOMEW CLOSE, LONDON, E.C.1



"The Box with the Pink wrapper."

PRICE **1/3** PER BOX

(They cost 5/6 doz., and thus show 9½d. profit.)

If you have never stocked these Pills, send a postcard and we will forward **FREE OF CHARGE** for either Pills or postage, $\frac{1}{2}$ dozen, in Outer Counter-box, with Showcards and Counter-bills, just to demonstrate to you how well they sell.

TRY THEM and you will always stock them.

A Yorkshire Chemist writes:

"I never in over 30 years of Pharmacy recommended an article with greater confidence."

A Welsh Chemist writes:

"The Samples arrived at 3.30 to-day, and were at once put on the counter with 2 Showcards. When we closed at 6 p.m. four boxes had been sold. In each case the customer's interest was aroused by your display matter. Please send 6 dozen boxes with our name and address."

The ACTON PILL & TABLET Co., Ltd.
BROADWAY CHAMBERS, ACTON, LONDON, W.3.

THE P.A.T.A.

(The Proprietary Articles Trade Association)
FOUNDED 1896

**THE PRICE MAINTENANCE
ORGANISATION OF THE
DRUG TRADE.**

MEMBERSHIP.

Proprietary Manufacturers ... 440
Retailers ... 9,000
and all eligible Wholesale Distributors.

No Manufacturer of a Proprietary article sold mainly by the Retail Chemist can afford to be outside the P.A.T.A., if he values the goodwill of the Retail Distributor. The P.A.T.A. ensures for distributors a fair and guaranteed rate of profit on sales of Proprietary articles. Manufacturers of Proprietary articles are, therefore, expected to place their products on the P.A.T.A. List.

Manufacturers of PROPRIETARY ARTICLES (distributed by the Drug Trade) who are not at present "on the P.A.T.A." are invited to join. The subscription is 6 guineas a year. For particulars apply to THE SECRETARY, 43 Gordon Square, London, W.C.1.

PONTAMPON

(Registered
Trade Mark)

(VAGINAL TAMPONS)

"A" ICHTHYOL COMPOUND

"B" ICHTHYOL 10%, &c., &c.

(List of Medications on application.)

THE PONTAMPON CO. (V. A. Blenkinsop)
55 HOLBORN VIADUCT, LONDON, E.C.1.

BUDNIP REMEDIES

—are excellent preparations—You can recommend them with every confidence—They show very good profits. Ask us for special terms. From your usual wholesaler, or direct from

BUDNIP Ltd., Budnip House, OLDHAM

Telephone - - - Oldham 2136



THE ONLY ABSOLUTE COCKROACH EXTERMINATOR

is **BLATTIS**, The Union Cockroach Paste

This is guaranteed by the Sole Makers to completely destroy them in all climates.

HOWARTHS, 473 Crookesmoor, SHEFFIELD, 10

Tins 14/-, 26/-, 49/- doz. Liberal discounts

AN ANNOUNCEMENT **PARK BUCKERIDGE & COMPANY LIMITED** have pleasure in announcing that they are now manufacturing in this Country, under the original formulae, the renowned **DARTING LANOLINE TOILET CREAM** and **GARDENIA VANISHING CREAMS**. Darting Toilet Preparations have a world wide reputation and have been the leading beauty products for over 50 years. Stocked by all the leading Wholesalers, or may be obtained direct from us.
PARK BUCKERIDGE & CO., LTD., Dominion Works, Thames Road, Chiswick, W.4

English
FilterPOSTLIP
PapersSQUARES
CIRCLES
FOLDED
ROLLSWHITE
GREY
PLAIN
ANTIQUE
EMBOSSED
CRINKLEDSAMPLES
FREEPostlip Filterings are stocked by all the leading Wholesale
Laboratory Dealers.

Evans, Adlard & Co Ltd

Postlip Mills, Winchcombe, Cheltenham.

PERKEN, SON
& CO., LTD.

Established 1852.

Contractors to H.M.
Government.THE
"MATER"
CLINICAL
REGD.ALL
TYPES
OF
CLINICAL
AND OTHER
THERMOMETERS

Price List on Application.

94 HATTON GARDEN,
LONDON, E.C.1Telephone: 0724 Holborn.
Telegrams: "Optimus, Smith, London."

Forster's "Eldon"
Vapouriser FOR USE
WITH
NIGHT LIGHT

Retail, 1/9. Wholesale, 15/-.
Also Forster's "Fenolin Fluid" For Whooping Cough.
Write for particulars
HALL, FORSTER & CO., Ltd., Newcastle-on-Tyne.

MORFI RUBBER
PRODUCTS
KAYDOR LTD.
30 Howland Street
Telephone: Museum 9143. LONDON, W.1

SANITARY TOWELS

made
byThe ORIGINAL and Most Popular
The "K." All wool in knitted cover,
very soft.
The "CELTEX." Made of Cellulose
for easy disposal.

FROM YOUR WHOLESALE HOUSE, PLEASE

SOUTHALLS

FEET PREPARATIONS

THAT THE PUBLIC DEMAND.

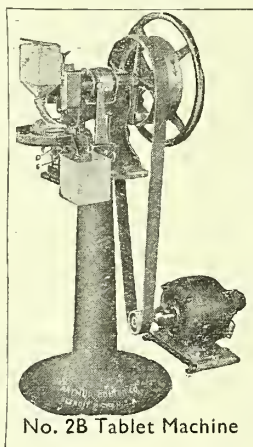
BACKED BY A REPUTATION
OF OVER FORTY YEARSFrom the Usual WHOLESALE
OR DIRECT**HOBSON, TRIMBLE
AND CO., LTD.**

9/11 UNION ST., LEEDS

Hobson's Choice
FEET PLASTERS
POWDERS

Colton Pharmaceutical Machinery

PILL MACHINES
TABLET MACHINES
GELATINE COATERS
GRANULATORS
POLISHING PANS
SUPPOSITORY MOULDS
TRITURATE MACHINES
PASTE MIXERS
TUBE FILLERS
TUBE CLOSERS
CLIP FASTENERS
NICKELOID CLIPS, ETC.



No. 2B Tablet Machine

TABLET MACHINES

Colton Tablet Machines possess all the good qualities growing out of many years of experience in this field. A range is available that will produce every size of tablet from $\frac{1}{8}$ to 3 inches diameter, in outputs varying from 100 to 1,500 per minute.

CLIPLESS CLOSURE

A new method of sealing collapsible tubes, eliminating the use of the metal clip and giving greater security to the contents with a more decorative appearance to the finished tube.

Write for copy of New Catalogue

SOLE BRITISH AGENTS

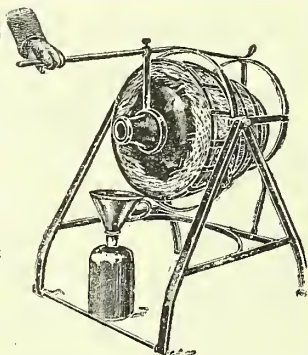
GRIFFIN AND TATLOCK, LTD.
KEMBLE STREET, KINGSWAY - - - LONDON, W.C.2

CARBOY STAND AND TILTER.

For drawing off small quantities of acids, etc., from Carboys, with ease and safety.

The Carboy can be tipped to any position with one hand.

R. & H. LEIGH & SONS,
LIMITED,
Carboy Hammer Manufacturers,
BOLTON.



* MIXING MACHINES * FOR ALL PURPOSES

ALSO

**GRINDING, FILLING & SIFTING
MACHINES, &c.**

INQUIRIES INVITED
WRITE FOR CIRCULAR No. 24

* * *

W. ROWLANDSON & CO.
75 MARK LANE, LONDON, E.C.3

Small Rotary Pill Cutting Machine & Piping Press.

ASK YOUR AGENTS FOR PINDAR & CO.'S MACHINES—ORIGINAL MANUFACTURERS.

This is a Machine specially constructed for the use of Chemists or Manufacturers of small quantities of Pills. Capacity about 5 lbs. per hour. Can be used on Counter or where little space can be spared, The Piping Press and Machine occupies a space of 2 ft. by 1 ft.

These Machines make one size Pill. By means of extra Plates and Rollers any size of Pills can be made.

Extra Plates and Rollers
to fit Machines, 24 6 0.

Price, the two machines, £12.

SMALL LEVER HAND TABLET MACHINE, 60 TO 80 PER MINUTE, £7 15

Power Tablet Compressing Machines, Coaters, Complete Pill Plants, End Runner Mills for Ointments, Linseed Grinding Mills, Tincture Presses, Emulsifying Machines, Percolators, &c., Mixing and Kneading Machines, Drying Ovens, Hand Pill Machines.

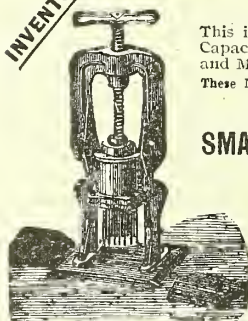
COLD COMPRESSION SUPPOSITORY MACHINES.
SUPPOSITORY AND PESSARY MOULDS, LIP SALVE MOULDS, Etc.

J. W. PINDAR & CO., LONDON, S.E.4.

Works: ENDWELL ROAD, BROCKLEY, LONDON, S.E.4.

Telegrams: "Pindar, Brockley, S.E."

Telephone: 1065 New Cross.



PIPING PRESS.

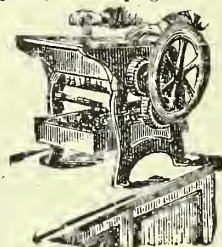


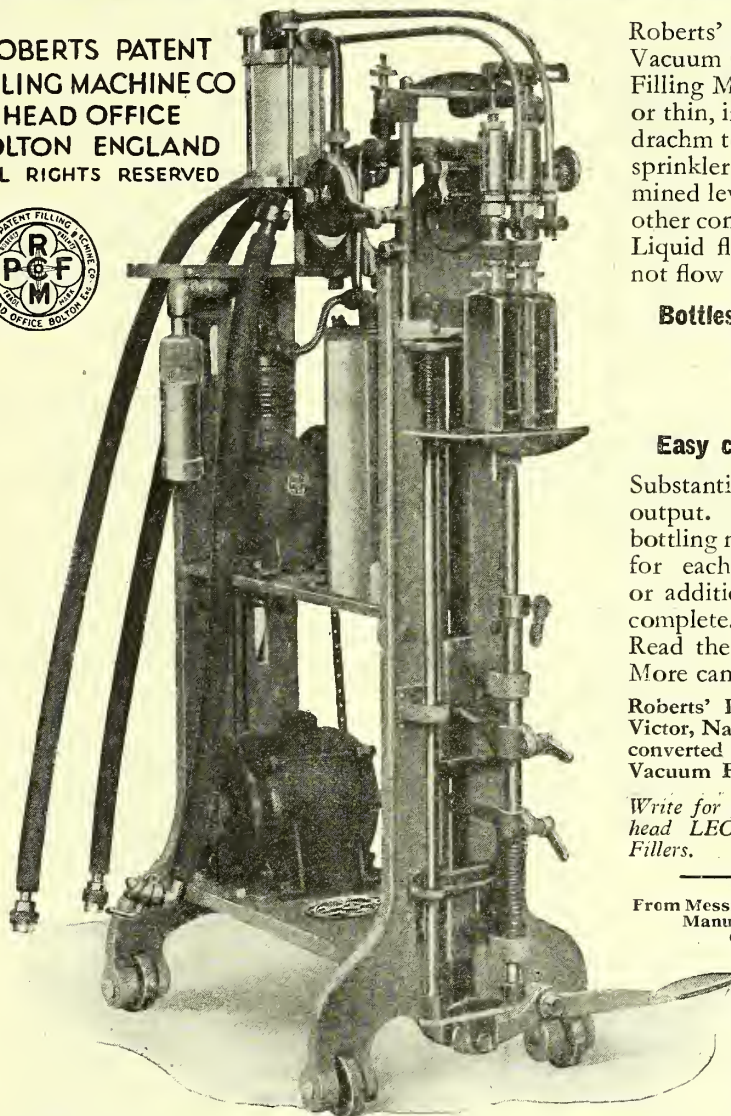
Fig. B. No. 2.

ROTARY CUTTING MACHINE

THREE MACHINES IN ONE

Vacuum Filling. Vacuum & Gravity Filling. Gravity Filling.

ROBERTS PATENT
FILLING MACHINE CO
HEAD OFFICE
BOLTON ENGLAND
ALL RIGHTS RESERVED



Roberts' Patent Sunbeam and LEO Vacuum Glass, Stone and Tin Bottle-Filling Machines, fill all liquids, thick or thin, into all sizes of bottles from drachm to quart, with long, short or sprinkler necks, to any predetermined level. From casks, drums or other containers standing on the floor. Liquid flows in a closed circuit. Will not flow into a broken bottle.

Bottles cannot be over-filled.

Clean filling.

No spilling.

No waste.

Easy cleaning. Self-rinsing.

Substantial construction. Large output. Low prices. Inexpensive bottling nipples. Three different sizes for each filling head. Renewals or additions in stainless steel, 10/6 complete. Nipples are easy to change. Read the opinions of eminent users. More can be provided.

Roberts' Patent Alpha, Model, Nelson, Victor, Navy, etc., Gravity Fillers can be converted at low cost into Sunbeam Vacuum Fillers.

Write for particulars of One- Two- Three-head LEO and Sunbeam Vacuum Bottle Fillers.

From Messrs. ELIJAH DAY & SONS LIMITED
Manufacturers and Importers,
Claremont Road, Rusholme,
MANCHESTER.

June 3rd, 1932.

Messrs. Roberts' Patent Filling
Machine Co.,
33, Roundcroft Street,
BOLTON.

Dear Sirs:—

Regarding the Vacuum Liquid Filler and Corking Machine you fixed up for us some time ago, we thought you might like to know our opinion of this. To

be candid, we are delighted, we get very accurate filling, no waste, no upkeep, they are easily and quickly cleaned. One operator fills on an average 45—8 oz. bottles per minute, and she can easily keep this up all day, the Corking Machine takes this quantity easily; further, this we consider is important, we have saved a lot of room with this lay-out. You are no doubt aware that we have only got your Filling Machines throughout our Works, they have stood the test of time and we have come to the conclusion that BRITISH MADE still pays.

With best wishes,

Yours faithfully,
FOR ELIJAH DAY & SONS, LTD.

Patent Nos. 284834-28—310642.29. OTHER PATENTS PENDING

Messrs. GOODALL, BACKHOUSE & CO., Wholesale and Manufacturing Chemists & Druggists, Leeds. May 31, 1932.
Messrs. Roberts' Patent Filling Machine Co.,
33, Roundcroft Street, BOLTON.

Dear Sirs:—

For many years we have been users of your Filling Machines and have found them to be entirely satisfactory. We have recently installed one of your new "Leo" Double Nipple Vacuum Filling Machines, and find it in every way satisfactory, clean, and accurate. We consider these machines to be outstanding examples of modern machine fillers.—Yours faithfully,

GOODALL, BACKHOUSE & CO.

ROBERTS' PATENT FILLING MACHINE CO.

(T. ROBERTS, PROPRIETOR)

33 ROUND-CROFT STREET, BOLTON, Lancs.

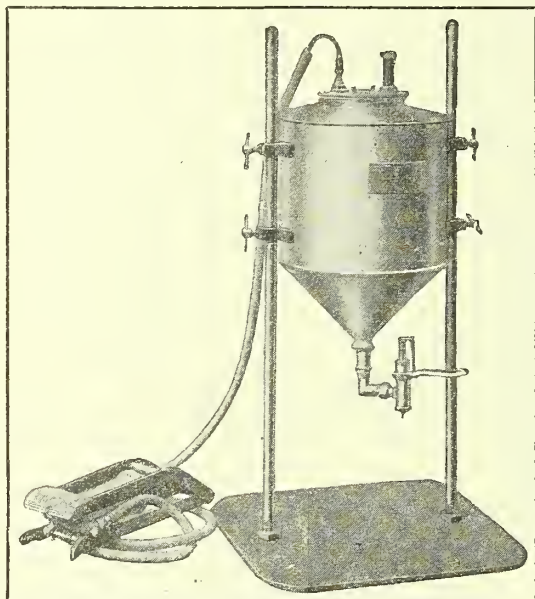
Telephone : 661 BOLTON.

All Rights Reserved.

Telegrams : "FILLING, BOLTON."

THE "LAUDER" BOTTLE FILLING MACHINE

(NO. 4A)



SOLE MANUFACTURER

L. T. LAUDER (Specialist in Small Machines) **4 Miles Hill St., Leeds**

'PHONE : 43039

(COMPRESSED AIR)

PATENT PENDING

For the quick filling of SPRINKLER NECK BOTTLES this novel and inexpensive machine is no mere experiment but a proven practical device, at once SIMPLE & EFFECTIVE whilst EASY TO OPERATE AND CLEAN

Strongly made of STAINLESS STEEL: 2 gallons capacity: steel base, 14½" square: Blow off SAFETY VALVE: NO INTERNAL MECHANISM: Self-contained valve with INSTANT "CUT-OFF": all fittings CHROMIUM PLATED: will fill many different sizes of containers.

Price (complete with foot pump and range of nozzles from 2 m.m. upwards) **£8 10 0** nett, carriage paid

F.O.B. 5% extra. Also made in 5 gallons capacity (with additional filling device from side of machine) **£12 10 0** nett, carriage paid. F.O.B. 5% extra.

WIRES: "LAUDER," 'PHONE 43039, LEEDS

COLLAPSIBLE TUBE FILLING MACHINE

for filling Ointments, Face Creams, Dentifrice pastes etc. Adjustable for small or large amounts up to about 5 liquid ounces.

Instantly dismantled for cleaning.

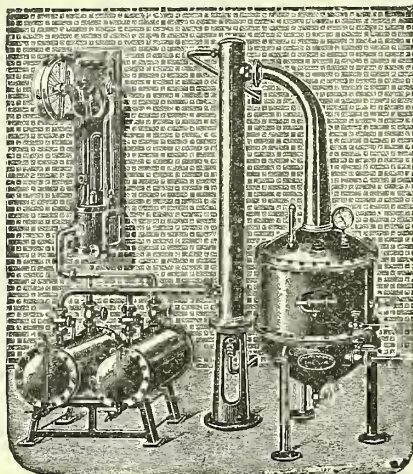
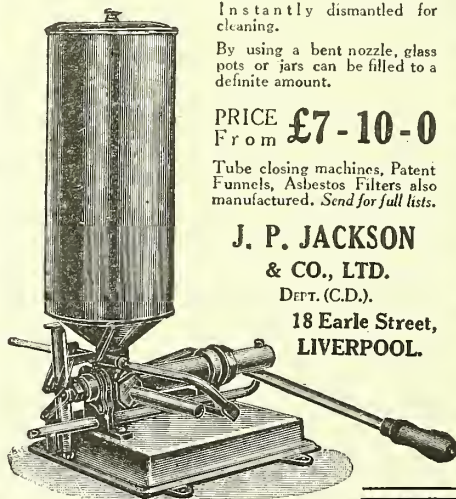
By using a bent nozzle, glass pots or jars can be filled to a definite amount.

PRICE
From **£7-10-0**

Tube closing machines, Patent Funnels, Asbestos Filters also manufactured. Send for full lists.

J. P. JACKSON
& CO., LTD.

DEPT. (C.D.).

**18 Earle Street,
LIVERPOOL.**


STILLS, VACUUM STILLS, VACUUM PANS.

Evaporating Pans.

Autoclaves and Digestors.

Special Apparatus and Plant for Manufacturing Chemists.

Sole Makers of Bennett's Patent "Ideal" Annular Film Condensers.

Shears' Patent Mulser.

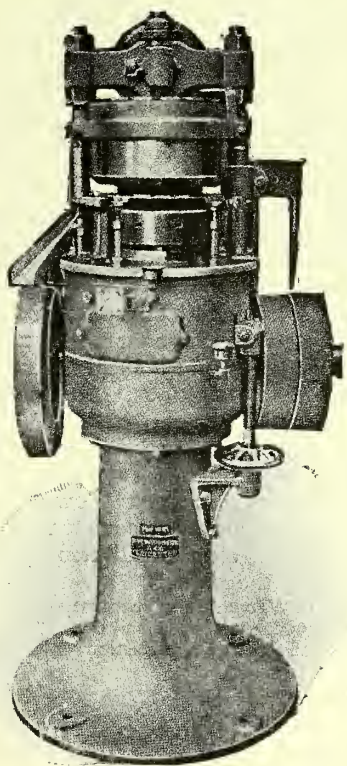
BENNETT, SONS & SHEARS, LTD.

Engineers & Copper-smiths,

43 & 44 Shoe Lane - - - LONDON, E.C.4

S.W. WILKINSON & Co.

CHEMICAL ENGINEERS
Western Road, LEICESTER.



WILKINSON'S Super Speedy OINTMENT MILL

Our Original Speedy Mill proved a great success, about 300 having been sold. This new type is the result of twenty years' experience with the original Mill, and its improvements are so great that many of the users are scrapping the old Mills and putting in the new Super Speedy, with very satisfactory results. Allowance is made for the old Mill in part exchange for the new type.

WILKINSON'S ROTARY TABLET MACHINES

Now made in 4 sizes.

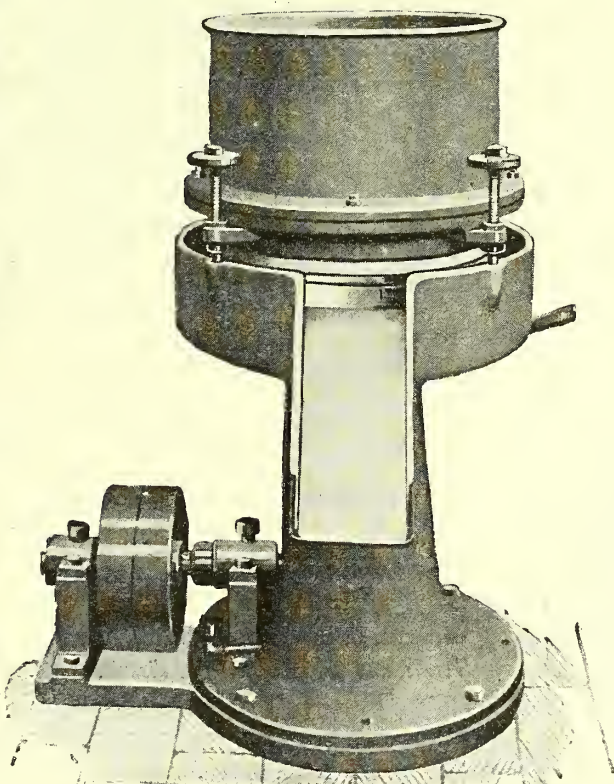
12 Punch Ordinary, $\frac{3}{8}$ " to $\frac{7}{8}$ " diam.
Output 300 per min.

20 Punch Ordinary, $\frac{1}{4}$ " to $\frac{1}{2}$ " diam.
Output 500 per min.

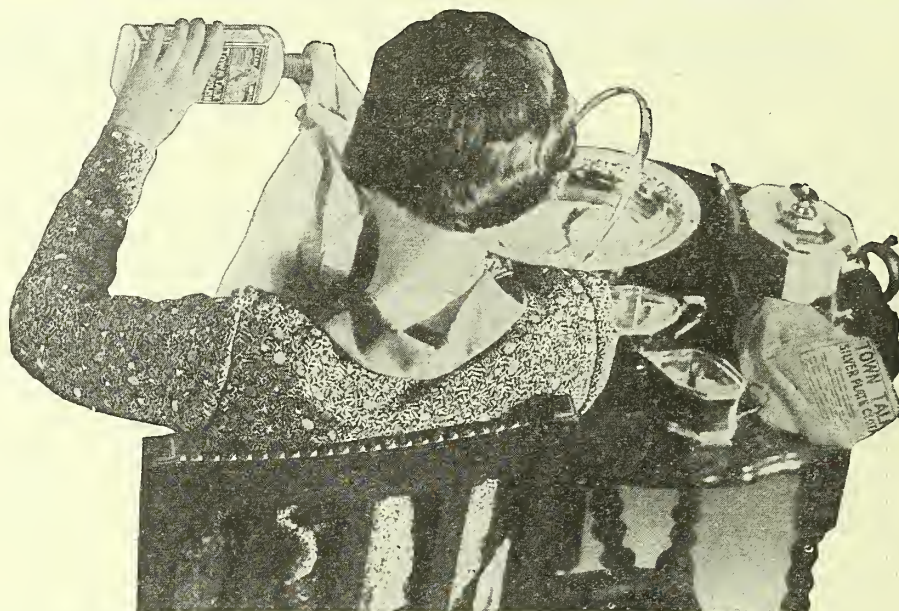
12 Punch Heavy for Thick Tablets
and blocks. 1" diam.
Output 250 per min.

18 Punch Heavy ditto.
Output 400 per min.

*Single Punch Machines in 5 sizes $\frac{1}{8}$ "
to 3" diam. also Lozenges and Bath
Salt Tablets.*



COPPER PANS, STILLs,
CONDENSERS, Etc., Etc.



Housewives who use "Town Talk" invariably speak of the "pleasure" they take in cleaning their Silverware, for the cleanliness and ease with which it is used exclude any possibility of the work becoming laborious, dirty or irksome.

In addition, the deep rich shine of mirror-like brilliance it imparts is positively unequalled, but more important than all else to the particular housewife, is the fact that "Town Talk" does not, in fact can not, injure her cherished ornaments; that it can even be used to clean her Electro Plate without fear of wearing away the plating.

These supreme qualities are peculiar to "Town Talk" because they are inherent to the ingredients of which it is made, and the nation's housewives have been educated to a full appreciation of this by continuous advertising.

"TOWN TALK" has for years
been consistently advertised in

The Daily Mail.	Punch.	Homes & Gardens.
The Daily Express.	Good Housekeeping.	My Home.
The Daily Dispatch.	Woman's Journal.	Ideal Home.
	Woman & Home.	Coming Fashions.

In consequence Stockists do not have to sell "Town Talk"—they are asked for it.

ORDER DIRECT, OR FROM:—
James Woolley, Sons & Co., Ltd.
Ayrton, Saunders & Co., Ltd.
Brooks and Warburton, Ltd.
Goodall, Backhouse & Co.

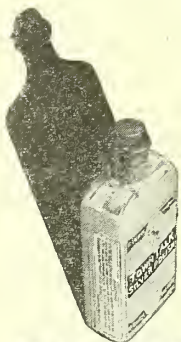
MANCHESTER.
LIVERPOOL.

LEEDS.

Terms and samples for free distribution from the sole makers:

Town Talk Polish Co., Manchester

The "Town Talk" Impregnated Chromium Plate Cloth is specially made for cleaning Chromium Plating only, and is as efficient as is its namesake for Silver. Every Chemist should stock "The Town Talk 3"—the quick-selling, repeat order lines.



**SILVER
PLATE
CLOTH**



**LIQUID
SILVER
POLISH**

TOWN TALK



WORLD

the commendatory remarks of our customers show that Gardner Plants are rendering eminently satisfactory services on an almost unlimited range of materials. For reducing, sifting, mixing, blending, etc., wherever efficiency or economy are considerations there is a Gardner plant for the job.

GARDNER'S

PATENT "RAPID" GRINDERS
MIXERS AND SIFTERS

Wm. GARDNER & SONS
(Gloucester) LIMITED,
BRISTOL ROAD, GLOUCESTER.

TELEPHONE : 2288 (2 LINES.) TELEGRAMS : "GARDNER, GLOUCESTER."

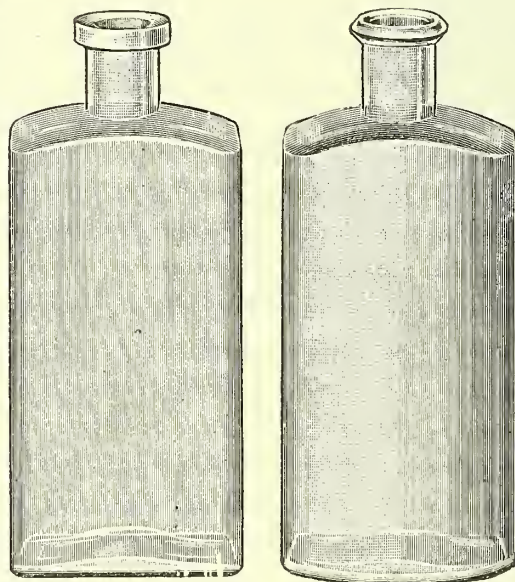
LONDON OFFICE :

19 Gray's Inn Chambers,
20 High Holborn, W.C.1.

TELEPHONE : CHANCERY 7347.

Beatson, Clark & Co.

LIMITED

Chemical & Medical Glass Manufacturers
ROTHERHAM, YORKS*The Chemists who are doing
the business are the Chemists
who turn the work out well.*

Round Cornered Flat

Oval Fronted Flat

*There is no better help than
a smoothly finished, bright,
attractive bottle.***TRY THE NO. 2 WHITE QUALITY**
REASONABLE IN PRICE
SATISFACTORY in FINISHTelegrams :
BEATSON, ROTHERHAM.'Phone :
No. 88, ROTHERHAM.**ESTABLISHED 1751****CORKS**
*for Chemists.*Send us your Enquiries
and compare our prices.*Wholesale and Export.***C. OLLEY & SONS, LTD.**

Established 1844.

Camperdown St. and Gt. Alie St., London, E.1

Tel. No.: Royal 2868. Tel. Ad: "Circumference, Ald, London."

METALLIC CAPSULES
FOR ALL KINDS OF BOTTLES AND JARS.**The Tonkin Metallic Capsule Co.***Proprietors : C. Olley & Sons, Ltd.***CHEMISTS'**
Show Cases
:: and ::
Shop FittingsGlass Counters. Centre Cases.
Wall Cases. Window Enclosures.
Glass shelves. Mirrors, etc., at
the lowest prices. Before pur-
chasing elsewhere it will pay
you to send to**GEORGE COOK****THE WORKING SHOP FITTER,**

Over 40 years' experience.

27 Macclesfield St., City Rd.**LONDON, E.C.1**

Phone : Clerkenwell 5371

SKETCHES & ESTIMATES FREE

LET A
BETTS'
PRODUCT
IMPROVE
YOURS!

**METAL
BOTTLE
CAPSULES**

Any size. Any
colour and
stamping

**COLLAPSIBLE
TUBES**

Plain or
coloured

**PERFUMERY
SPRINKLER
CORKS**

**TIN AND
LEAD FOILS**

Our quality and
service are unsur-
passed in the trade
—test us with your
inquiries

ALL
BRITISH
MADE

BETTS & Co.,
LIMITED
1 WHARF ROAD
CITY ROAD LONDON N.I.

**THE
CLIMAX HANGING PRISMATIC SIGN**

Effective and Attractive

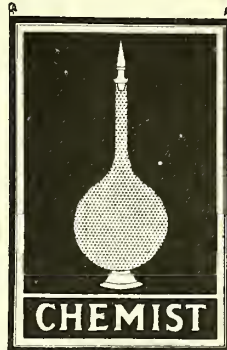
Strongly Framed in Metal
Shows a Prismatic Carboy each side (one
Red and the other Green). Coloured
Border Line, White Lettering, Black Ground.

SIZE—25 in. high, 15 in.
wide, showing Carboy as
illustrated (or Mortar &
Pestle if preferred).

SIZE—15 in. high, 25 in.
wide, showing 3 different
coloured Pearshape Car-
boys each side.

PRICES—As a Daylight Sign
in either style, **47/6**

As an Electric Box Sign,
wired for 2 lamps, **95/-**



All above complete with Hanging Bracket
and Two Side Stays.

AYRTON-GRAHAM LTD., Shopfitters
24 BENSON ST. (Renshaw St.), LIVERPOOL

**ARE YOU LOOKING
FOR SHOP EQUIPMENT
BARGAINS?**

Quickserving Cases and Counters suitable
for Chemists. Dismantled from High-
Class West-End Stores. Must be cleared.
Exceptional Bargains. Thoroughly
overhauled and repolished. Excellent
condition. Offered subject to being
unsold. Let us know your requirements.

Showrooms:

29

Clerkenwell
Road,
E.C.1

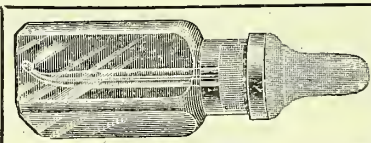
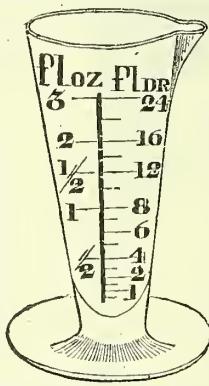
COME
AND
SEE
THESE
BARGAINS

PRICES AND PARTICULARS ON APPLICATION
INSPECTION INVITED

Pollards

DISMANTLED EQUIPMENT DEPT.
29 CLERKENWELL ROAD, E.C.1

'Phone: CLERKENWELL 6700 (Ext. 78)

DEAD IN THE CENTREfor
GRADUATED MEASURES**THE REGULATOR****ALL ENGLISH****PERFECT
FITTING****NEW LOW PRICES
ALWAYS IN STOCK****DROP BOTTLE****SERVES
100
PURPOSES
IDEALLY
WELL****WE BLOW ALL
CHEMISTS' AND KINDRED
GLASSWARE****M. J. FECHER, Ltd.,** Cuckoo House, 10 Dod Street, LONDON, E.14.**THE "IODROP" REFILL IODINE PENCIL**

(Regd. Pattern)

**THE NEATEST & CHEAPEST
THING OF THIS KIND
FILLED OR EMPTY****BUY****BRITISH***are better than ever.***6 and 8 oz.**N.H.I. 5^{d.} per gr.Ordinary 8^{3d.} „Fine 1/1¹/₂ „

Finest 1/8 „

10 gross carriage paid.
20 gross - - less 5%.

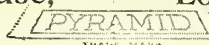
Less 5% cash with order.

Write for full Price List and Size Gauge

N. W. Mitchell & Snow, Ltd.

"The Cork Firm."

Limehouse, London, E. 14.

**WE MAKE****GLASS BOTTLES****AND CAN GIVE YOU GOOD QUALITY AT
LOW PRICES**Ask us to quote for
MEDICALS, PANELS, AMMONIAS
or any other kind**Wm. HANSON & SONS, LTD.**
ROSEGROVE - - - BURNLEY

Phone : 3307

- FOR -

GLASS BOTTLES

WRITE TO

FRED^K. YOULDON

(formerly Proprietor of E. Youldon. Established 1840)

68 Basinghall Street, London, E.C.2

Phone : Metropolitan 4923.

Telegrams : "Youldon, Ave, London."

TAPERED, PYRAMID, DOMED
AND FLANGE

CORKS

COMPOSITION AND
BAKELITE

STOPPERS

*The most competitive manufacturers in this
country.*

MUNDET CORK PRODUCTS
LIMITED,

12/18 ABBEY STREET, TOWER
BRIDGE ROAD, S.E.1

Telegrams :
MUNDETCOMP, BERM, LONDON

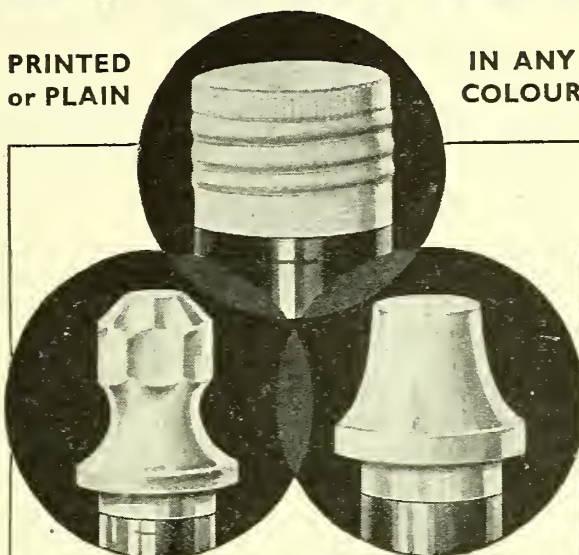
Telephone :
HOP 2685 & 3979

VISKAP

SELF-FIXING
BOTTLE CAPS

PRINTED
or PLAIN

IN ANY
COLOUR



PROTECTION

first, last and all the time is definitely assured when
your product is sealed with a Viskap. Place a wet
Viskap in position—let it dry—seals as it shrinks.
Perfectly hygienic. Entirely British.

ALSO

VISCOID

MOULDINGS

OF ALL DESCRIPTIONS

FROM

Bakelite & Similar Materials

Send us your enquiries.

We have a reputation of many years
of service and quality to keep up
and are anxious to help you.

LET US ADVISE AND QUOTE YOU

VISCOSE DEVELOPMENT CO., LTD.
WOLDHAM ROAD, BROMLEY, KENT

Telephone : Ravensbourne 4561

NOW BRITISH MADE

WAGNER'S DRY BOTTLE CAPS
BEST IN QUALITY & APPEARANCE



R.V. WAGNER

33 BRIDGEMAN ST., LONDON, E.C.1 Tel. : Holborn 5090

DRY. SELF-FIXING. ALL SIZES.

Finest Quality and Appearance.

Bottle Caps

Enquiries Invited. Samples Submitted.

T. C. Bussell 34 Gt. Tower St.
LONDON, E.C.3.

Phone : Royal 2154.

PHARMACEUTICAL

W **HIGHEST**

DISPENSING
BOTTLES
CHEMISTS
ROUNDS
FEEDING
BOTTLES
SOXHLE
BOTTLES
EYEBATHS

SPRINKLER
BOTTLES
OPAL AND
FROSTED
GLASSWARE

QUALITY

GLASSWARE

K. GRAHAM



DESIGNERS & MANUFACTURERS
OF GLASSWARE FOR PERFUMES
COSMETICS AND BATH SALTS

WOOD BROS. GLASS CO
LIMITED

(ESTABLISHED 1828)

BARNSELY . . . ENGLAND

"Adaptocaps"

*will give
your bottles
Distinction*



These Dry Bottle Caps are made in all sizes and colours, clear and opaque. They are Self Sealing, of unrivalled quality and BRITISH MANUFACTURE. Special low rates for large contracts. Let us quote you.

The London Capsule Co
EMPIRE WORKS, MITCHAM RD., CROYDON
Telephone : Thornton Heath 3014

PHARMACY FITTINGS

We are actual Manufacturers of all Fittings and showcases for the

MODERN PHARMACY

AT COMPETITIVE PRICES

COMPLETE SET OF FITTINGS

£60

IN SOLID OAK OR MAHOGANY

Send NOW for Illustrated List. Your
Inspection invited at Works. Only address.

MYERS, 134a Kingsland Road, E.2

(1 minute Shoreditch Church.) Phone : BISHOPSGATE 2524.

Book to Shoreditch Church by Bus or Tram from any part.

SOAKING BRUSHING & RINSING EQUIPMENT

for anything
from a Vial to a
Winchester!

WE have in the printer's hands a new booklet dealing thoroughly and practically with all equipment cleaning problems from those of the Dispensing Chemist to the Large Manufacturing Chemist. May we send you a copy, as soon as it is released? Please apply early (on your usual business heading) as the edition is limited.

Write
for
List
No. 45

THOMAS HILL
ENGINEERING Co. (HULL), Ltd.
Park Lane, Stepney, HULL

Chemists' Sundriesmen & Wholesalers

could do no better than
entrust their enquiries for

Chemists' Rubber Sundries

to

The Leyland & Birmingham Rubber Co., Ltd.,
Grand Buildings, Trafalgar Square, W.C.2.

Works : Leyland, Glasgow, Mitcham, Preston, Dublin.

Branches :

BIRMINGHAM : 124, New Street.

MANCHESTER : 29, Brown Street.

CARDIFF : Harrowby Street "Docks."

NEWCASTLE-ON-TYNE : 36, Collingwood Street.

GLASGOW : 32, Miller Street, C.I.

LIVERPOOL : Wellington Buildings, The Strand.

DUBLIN : 83, Middle Abbey Street.

LEEDS : 7, South Parade.

PRESTON : Palatine Branch, Pole St. Mills.

JOHANNESBURG : Barsdorf's Buildings.

CALCUTTA : Hongkong House, Council House Street.

BUENOS AIRES : Calle Carlos Pelligrini No. 928.

Leyland Surgical Products

Obtainable through all Wholesale Houses :

Fabric Hot Water Bottles
Pharmal Moulded Hot Water Bottles.
Air Cushions.
Douches.
Bed Pans.
Air Beds and Pillows.
Water Beds and Pillows.
Sponge Bags.
Bathing Caps.
Household Gloves.
Cut Sheet Rubber Gloves.
Umbilical Belts.
Ice Caps.
Finger Stalls.

Urinals.
Enemas (The Sterenema and Pharmena).
Whirling Sprays.
Elliptical Syringes.
Spray Bellows.
Acorn Syringes.
Dental Bulbs.
Rat Tail Syringes.
Injection Bottles.
Insect Powder Distributors.
Bell Syringes.
Breast Relievers.
Syringes of all types.
Dental Face Pads.

Nu-Leda Teats.
Dental Suction Discs.
All rubber Soothers.
All shapes of Teats.
Corks and Bungs.
Crutch and Stick Pads.
Pharmal Breast Relievers.
Beach Shoes.
Muff Warmers.
Cut Sheet Bandages.
Dental Gas Bags.
Breast Shields.
Cut Sheet Tying.
Vaccine Caps.
Test Tube Caps.



The Leyland & Birmingham Rubber Co., Ltd.



The Sterenema

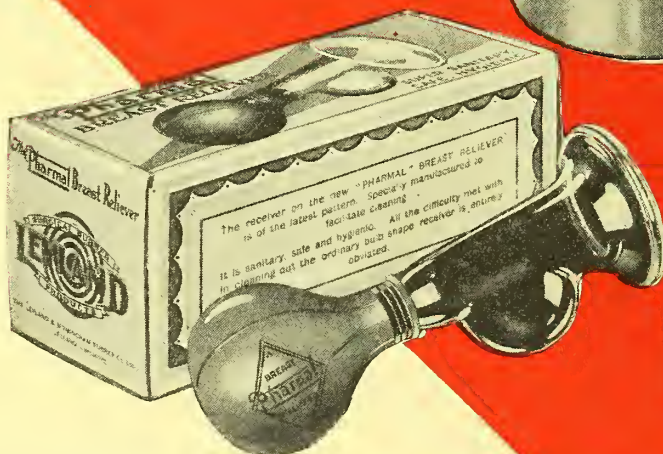
Made from LEYLAND quality rubber, seamless and fitted with glass fittings, and guaranteed to be sterilizable in entirety.

Wholesale Price, 4/- doz.
Minimum Retail Selling Price,
5/6 each.

The Pharmena

Made from LEYLAND quality rubber, seamless, guaranteed not to crack or split. In three colours red, green, and black, polished.

Wholesale Price, 32/- doz.
Minimum Retail Selling Price,
4/- each.



On the P.A.T.A.

The Pharmal Breast Reliever

Made from specially annealed glass and finest para rubber. Thoroughly safe, sanitary and hygienic.

Wholesale Price, 28/6 doz.
Minimum Retail Selling Price,
3/6 each.

Obtainable through all
Wholesale Houses

SURGICAL RUBBER

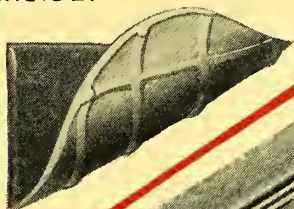
LEYLAND
PRODUCTS

The Leyland & Birmingham Rubber Co., Ltd.

Pharmal

HOT WATER BOTTLES

RUBBER REINFORCED BY
STRENGTHENING RIBS ON
INSIDE.



**Fixed Retail
Price**

12" x 8" size

2/6 each



WHY PHARMAL IS BETTER

1. The Pharmal Moulded Bottle is made from the finest quality rubber of extremely high tensile strength.
2. It is reinforced. Every square inch is strengthened with a rib of rubber, so preventing sagging when full.
3. The sides are flat and solid, giving greater strength where wear and usage are likely to damage the bottle.
4. A wide sensible funnel allows hot water immediate entrance ; easy filling and no risk of scalding. Guarantee seal attached to every bottle.

Available in Red, Green, Blue, Pink ; also Red and Blue Marble, Blue and Green Marble, Green and Red Marble and Jazz.

SURGICAL RUBBER
LEYLAND
PRODUCTS

The Leyland & Birmingham Rubber Co., Ltd.

Ask us to quote for
Super Quality

Glauber
Salts B.P.

Epsom
Salts B.P.

*Special types of crystals
matched and any
degree of exsiccation
to order.*

PACKED FOR HOME OR EXPORT

Cattle
Salts

M
B

Harris, Hart
& CO. LTD.

Moss House Chemical Works
BLACKLEY, MANCHESTER

"Harp, Blackley, M/c."

Cheetham Hill 2853

C & D
DEPARTMENTS
AT YOUR
SERVICE



ADVERTISEMENT DESIGNING

There is an up-to-the-minute Studio and Drawing Office, fully equipped and expertly staffed, ready to do anything you require in the way of drawings, photographs or layouts in the latest styles and using the newest types.



SUBSCRIBERS

Our Information Department is available from 9.15 a.m. to 5.15 p.m. daily, and Saturdays 12.30 p.m. Hundreds of enquiries are answered weekly and the staff is ready to deal with as many more as you like to send.



COLOURED SUPPLEMENT

Business for Sale? Surplus stock to get rid of, Assistant wanted, Agent, Traveller or Locum needed? Send particulars and your requirements will be quickly and satisfactorily filled.

28 ESSEX ST. STRAND, LONDON

Phone: Central 6565 (8 lines). Telegrams: "Chemicus, Estran 1, London."

Don't lose customers- whilst finding corks



"Take its
name and
number"

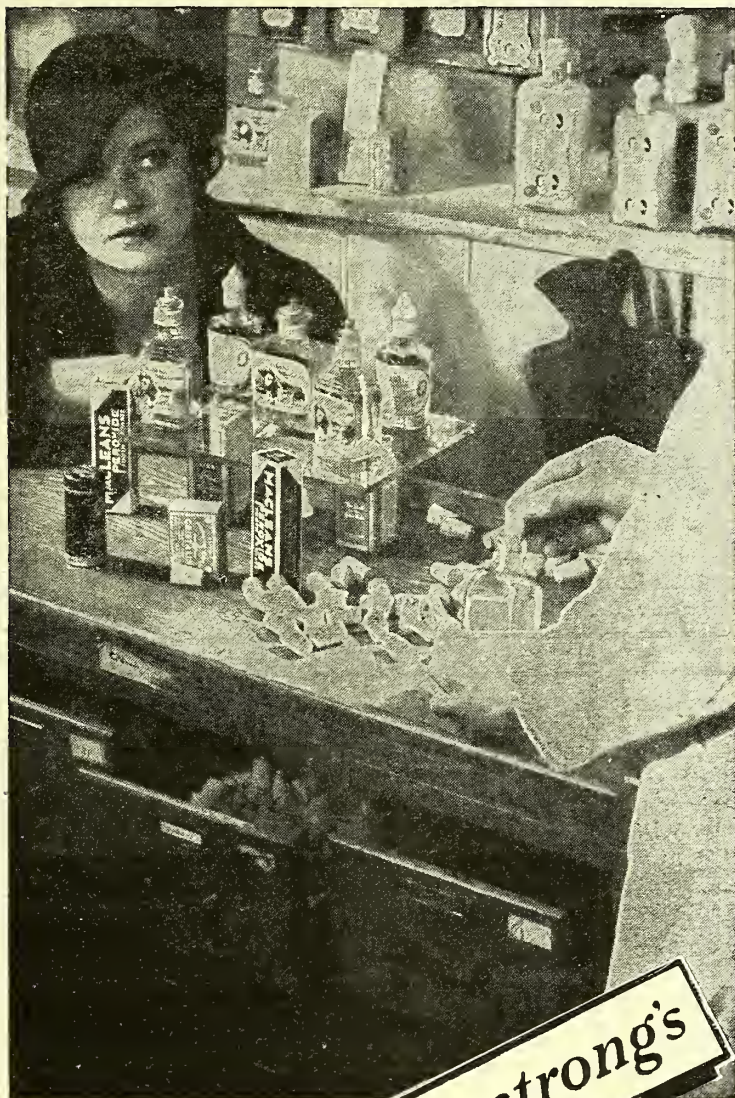
Nowadays people
don't like delays.

They like to be
served soon and served
quickly. It takes time to fill
bottles; don't let it take
long to cork them.

Adopt the Armstrong Cork
system now and you'll have
no more trouble with corks.
No delay, no irritation, no
lost custom. All Armstrong
Corks are classified, in a full
range of sizes, every size
numbered. And each cork
in its class is exactly alike in
size and shape and taper.

ARMSTRONG CORK CO. LTD.,
Cork Division,
Aldwych House, Aldwych, London, W.C.2.

The Armstrong Cork "String"
carries patterns of all usual sizes.
Send for the "String" to-day with
samples of the five qualities avail-
able. Then you'll find your cork
problems ended for good.



Armstrong's

CORKS

STANDARD SIZES: STANDARD QUALITIES



The Extra Pharmacopoeia

By W. HARRISON MARTINDALE, Ph.D.

19th Edition. Vol. I 27s. 6d. net, postage 6d. Vol. II 22s. 6d. net, postage 4d.
The two vols. 50s. net post free.

Vol. I (1928) deals chiefly with Treatment, giving the important issues as to the Clinical Use of all modern Chemicals and Drugs, characters, dosage, methods of prescribing, etc.

Vol. II (1929) COMPLETES THE SET. It is concerned with INVESTIGATIONS, EXPERIMENTAL RESEARCH, DIAGNOSIS, etc.

THE SECRETARY OF THE PHARMACEUTICAL SOCIETY (Pharm. J., Jan. 30, 1932) says: "The Pharmacist (of to-day) must have available the most recent edition of the Extra Pharmacopoeia, and not an edition ten years old."

LANCET, Nov. 2, 1929, says: "A clear and authoritative publication of the highest value."

An up-to-date Book for everything on the Therapeutic Use of Drugs. It embodies the Latest and most Varied Information on Chemistry, Pharmacy, Therapy, and numerous other subjects.

LONDON: H. K. LEWIS & Co. Ltd., 136 Gower Street, W.C.1

Also obtainable from W. Martindale, Mfg. Chemist, 12 New Cavendish St., London, W.1

LONDON COLLEGE OF PHARMACY

(Founded by H. WOOTTON, B.Sc.) C. W. GOSLING, Ph.C. Principal: IRVINE G. RANKIN, B.Sc., Ph.C.

SPECIALISTS in TRAINING PHARMACISTS

PRELIM. SCIENTIFIC

6 Months' Courses: (a) Oct.-March
(b) Jan.-June (c) April-Sept.

Part Time—1 Day, 2 Days or
3 Days a week.

CHEMIST & DRUGGIST QUALIFYING

9 Months' Course

Oct.-June

REVISION

P. S. — C. & D.

Oct.-Dec. Jan.-March April-June

10 WEEKS July 6th-Sept. 16th.

6 WEEKS Aug. 3rd-Sept. 16th.

Optional Preparatory Postal Courses available for apprentices and juniors before they enter College.

Apply to The Principal: 361 CLAPHAM ROAD, S.W.9

Tel. No.: BRIXTON 2161

MANY SUCCESSES IN THE EXAMINATIONS

Your Opportunity to

QUALIFY IN OPTICS

PRACTICAL WORK. Personal tuition in the practical work is a distinctive feature. Students can avail themselves of the practical classes held during examination times when they are in London.

Expert Tuition for the SIGHT-TESTING DIPLOMAS of the Worshipful Company of Spectacle Makers (F.S.M.C.); the British Optical Association (F.B.O.A.); the National Association of Opticians (F.N.A.O.); or the College of Optics (F.C.O.)

Write for full particulars—

G. A. SCURR, M.P.S., F.S.M.C., F.B.O.A., F.N.A.O., B.Sc., F.I.O., F.C.O.
50 HIGH STREET, BARNET, LONDON, N.

WESTMINSTER COLLEGE OF PHARMACY.

WILLS' UNIVERSAL POSTAL SYSTEM

FEES (GT. BRITAIN & N. IRELAND).

PRELIMINARY SCIENTIFIC COURSE - £1 1 0

QUALIFYING COURSE - - - £1 1 0

APOTHECARIES' HALL COURSE - - - £1 11 6

POSTAL COURSE PROSPECTUS POST FREE

from The Secretary,

190 CLAPHAM ROAD, S.W.9.

Liverpool School of Pharmacy

2 BLACKBURNE PLACE, LIVERPOOL

Principal: H. HUMPHREYS JONES, F.I.C., F.C.S., Ph.C.
Assisted by JOHN BUTLER, B.Sc., F.I.C., Ph.C.; W. E. COATES, B.Sc., A.I.C., M.P.S.; W. G. COTTON, M.P.S.; P. H. JONES, F.I.C. (Pharmacist); S. D. LITTLEWOOD, M.P.S.; R. A. WILLIAMS, Ph.C., M.P.S.

Next Session commences on OCTOBER 6.

6 Months' Course for Part I; 9 Months' for Part II

Two Years' Course (part time) for Part I, Oct. 5

REVISION CLASSES for both Exams., August 8

FULL PARTICULARS FROM THE PRINCIPAL.

THE SOUTH OF ENGLAND COLLEGE OF PHARMACY

186 Clapham Road, LONDON, S.W.9

Principal—H. LUCAS, Ph.C., F.C.S.

assisted by a fully qualified and efficient staff.

REVISION COURSES for Parts I and II start on August 5 for the October Examinations. Fee 6 guineas.

NEW COURSES for both parts start on October 6.

Part I, 6 months, fee 20 guineas; Part II, 9 months, fee 30 guineas.

FOR ALL PARTICULARS APPLY THE PRINCIPAL

Good Printing

gets there

Wholesale
Chemists
& Retailers
alike will
find success

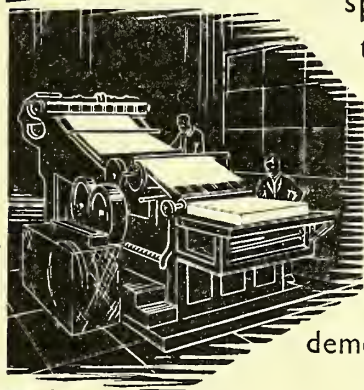


more cer-
tain by giving careful attention
to their printing, and dealing
direct with printers who

specialise in
their

particular
require-
ments.

Give us
an oppor-
tunity to
demonstrate our
claim.



We specialise in Labels, Folding Boxes,
Envelopes and advertising printing of
every description.

Send your next enquiry to

**Alf. Harrison
& Sons Ltd.**

Chemists' & Advertising Printers
Burley Road
LEEDS

London Office: Sentinel House,
Southampton Row, W.C.1
Phone: Museum 8340

ALSO AT DUBLIN AND BELFAST



The Survival of the Brightest

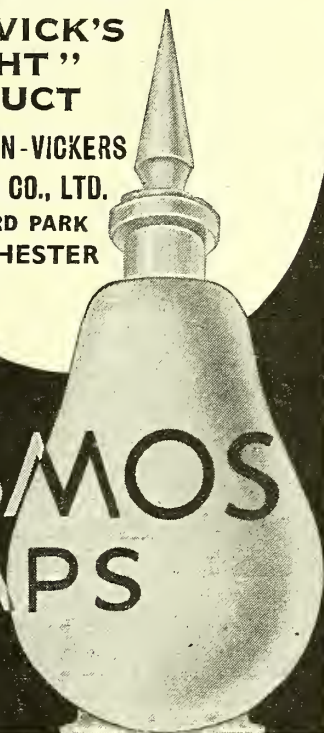
After many years, the old symbolic
Lights, once seen in every chemist's
shop, have almost disappeared.
Modern methods now produce bright,
glareless window and interior illumina-
tion, attracting thousands of prospective
buyers—the kind of illumination obtain-
able with COSMOS LAMPS.

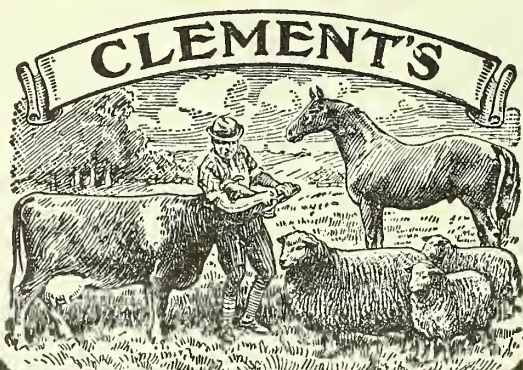
**METROVICK'S
"LIGHT"
PRODUCT**

**METROPOLITAN-VICKERS
ELECTRICAL CO., LTD.**

**TRAFFORD PARK
MANCHESTER**

**COSMOS
LAMPS**





This Medicine is a certain cure for many of the most distressing ills to which Horse and Cattle Flesh is heir. It surpasses all other Remedies in its promptness of action.

WHY CATALINE PAYS TO STOCK.

BECAUSE it enjoys the largest sale of any Cattle Medicine Preparation and is on the P.A.T.A.

BECAUSE it is consistently advertised and all advertisements refer to the Chemist as the source of supply.

BECAUSE it is well packed, does what it is advertised to do, and shows the trade a satisfactory profit.

BECAUSE we do not employ travellers to call on Farmers or solicit orders at cattle fairs or markets.

One size, retailed at face value, viz.

PER **3/9** BOTT.

Terms - Cash with order.
Carriage paid. Cases free.

1 doz., 36/- per doz. 6 doz., 35/- per doz.
3 doz., 35/6 12 doz., 34/6

Stocked by most Wholesale Houses.

THE CATALINE CO. LTD.
BRISTOL.

Continuous and Steadily Advertised Goods
FOR DESTROYING RATS AND MICE

DANYSZ VIRUS

Retail Price (Protected). Net Wholesale Price
Virus for Rats and Mice, single tube, 2/- .. 15/- per doz.

3 tubes, 5/-
Virus for Mice only - single tube, 1/6 .. 9/-
3 tubes, 3/-

Date-expired tubes returned to us postage paid will be exchanged free of charge.

Danysz Virus in Liquid Form

Retail Price Wholesale Price
Quart Bottles 6/- each .. 4/6 each
Pint 4/6 each .. 3/9

HALLER'S EXTRACT OF SQUILL and DANZO RAT KILLER

Discount off Retail Prices 25% Monthly Account, or 33 1/4% cash with order.

	Retail	Monthly a/c	Cash with Order
1/2 gall. tins ..	10/-	7/6	6/8
1 " " " ..	18/-	13/6	12/-
5 " " " ..	80/-	60/-	53/4

DANZO BEETLE POWDER

For destroying Blackbeetles, Cockroaches, Crickets, &c.

Retail Prices (Protected)	Wholesale prices per doz.
In tins 3d. ..	In boxes of 2 doz. 2/1
" 6d. ..	" 1 " 3/8
" 1/- ..	" 1 " 7/3
" 2/6 ..	" 1 " 18/-

Danzo Beetle Powder will not deteriorate by keeping.
CARRIAGE PAID ON ALL ORDERS.

To be obtained from
HALLER LABORATORIES, LTD.
325 Borough High Street, LONDON, S.E.1

Telegrams: "Virudana, Sedist, London."

Telephone: Hop 2717

THE VICTORY DISINFECTANT REGD. NO. 273459

For Cleansing Sinks, Drains, Lavatories, etc.

KILLS ALL VERMIN.

Instant Death to all Garden Grubs, Green Fly, Wireworm, etc.
INVALUABLE FOR ALL HOUSEHOLD PURPOSES. Used and recommended in Hospitals and leading Institutions.

WHOLESALE 30/- PER GROSS.

Packed in attractive Cartons or to your own design.

Household Products, 21 Blenheim St., Newcastle-on-Tyne

TREBLES SHOP FITTERS SHOP FRONT BUILDERS

PHARMACY FITTERS for over a Century.

549a Lea Bridge Road, Leyton, London, E.10

BATTLE'S VERMIN KILLER

Of all Patent Medicine
Houses at 3/-, 5/-
and 9/- per dozen.

In packets at 5d.,
9d. and 1/3 each.
(P.A.T.A.)

The sure destructive agent which may be
confidently recommended by Chemists for
quick clearance of rats and mice.
(Users' testimonials on request.)

Prepared only by
J. C. M. BATTLE, Ph.C., LINCOLN

A single MINUTE spent on a **BOB MARTIN** **DISPLAY** will make **DOUBLE SALES** **CERTAIN** - this summer

From orders received direct and through wholesale houses it is already clear that this Summer the sales of Bob Martin's Condition Powders will more than double their previous record of last February.

This is the result of the colossal Advertising Campaign now running in every important National newspaper. Large-space educational announcements advising dog-owners how to protect their dogs from the consequences of overheating are now appearing and will continue to appear *every week* throughout the Summer.

Nine out of every ten dog-owners in your neighbourhood, including the many who have lately become the owners of their first dog, are keeping their dogs fit with Bob Martin's Condition Powders.

People buy where their requirements can be met. A display piece on your counter will tell your customers that they need not go beyond you for Bob Martin's Condition Powders. *This Summer a single minute spent on a Bob Martin display will make double sales certain.* Start taking your share of these double profits NOW! A postcard will bring you a complete range of new display material.

BOB MARTIN LTD., SOUTHPORT, ENG.

Dog Food
and Medicine



Manufacturers
since 1892



To LINK your PHARMACY
with the biggest advertising campaign
ever produced for a dog medicine

This cut-out display piece, printed in full colours and occupying only nine inches of counter space, is the perfect link between the large-space advertisements now appearing in the National press and your pharmacy. Displayed in a minute and makes double sales certain this Summer.

CHEMISTS' TRANSFERS

Messrs. ORRIDGE & Co.

56 LUDGATE HILL, E.C.4

TELEPHONE: CITY 2283.

(ESTAB. 1846.)

May be consulted at the above address on
SALES, PURCHASES & VALUATIONS

VENDORS

Vendors have the advantage of direct attention and advice as to value without additional fee.

PURCHASERS

Purchasers who desire early information regarding eligible opportunities for entering business will greatly facilitate their object by describing clearly the class of connection they wish to obtain.

VALUATIONS

Valuations having always been a prominent feature, Messrs. Orridge and Co. trust that the lengthened period during which they have enjoyed the confidence of the Profession will be regarded as sufficient proof of their endeavours to conduct these transactions in an honourable and straightforward manner.

VALUATIONS FOR STOCKTAKING

Messrs. Orridge & Co. desire to emphasize the necessity of a periodical Statement of Account, by which means alone *Profit, the Value of Business, etc.*, can be determined. Involving as this does the labour of Stocktaking and Valuation, it is often omitted, and eventually becomes the cause of *confusion and loss*.

Messrs. Orridge & Co. are prepared to undertake these essential duties, and will make *Special Terms* for such services.

N.B.—NO CHARGE TO PURCHASERS

Terms for Valuation on application. Appointments by post, wire, or telephone have immediate attention.

SPECIAL Messrs. ORRIDGE & CO. have usually a large
NOTICE. number of Businesses for Sale suitable for Gentle-
men with capital, from £500 to £5,000.

ORRIDGE & CO., 56 Ludgate Hill, E.C.4

FOUR PROFIT LINES

FOUR PROFIT LINES



TOMLINSON'S DAIRY HELPS.

Butter Powder, Butter Colour, Cheese Rennet, Liquid Annatto, Junket Tablets, etc. Passed all Food Regulations. Water Glass for Egg Preserving. We are the largest packers of this article. Write for Lists and full details.



TOMLINSON'S POULTRY PRODUCTS.

COD LIVER OIL—Genuine.

IODISED MINERAL SALTS—Made to recognised formula.

KIL-TIK PERCH DRESSING.



HAYWARD'S SHEEP DIPS.

Dips packed in your Own Name if required Approved by Ministry of Agriculture. The original Hayward's Dips, introduced 1842. Hayco registered. PASTE, POWDER, FLUID.



EUREKA WEED KILLER.

Largest Sale. The Chemists' Favourite Brand. Easiest to sell. Sales through Agents. Powder and Liquid. Eureka Lawn Sand, Worm Killer, Fungicides, Quassia Extract, Sprays, etc.

ONLY ADDRESS:

TOMLINSON & HAYWARD, LTD.
51, NEWLAND, LINCOLN.

The Scottish Rat Poison that Kills Rats of all Nationalities—RODINE

Whatever may be the size, type, colour or Nationality of Rats or Mice; whether they are found in a Factory, Warehouse, Ship, on the Farm or in the Home, it is impossible for them to exist if Rodine is used. Rodine clears out swarms of Rats and Mice in a night. Fascinating and fatal, it never fails. Rodine is recognised as the Chemist's Popular Rat Remover. It yields a handsome net profit.

Push RODINE and Prosper

Get it on Best Terms, direct from the
Sole Maker:—

T. HARLEY, M.P.S.
RODINE WORKS, PERTH,
SCOTLAND



HARVEY'S

Watts' Embrocation, or Curb Bottle.
Aconite Powders.
Worm & Condition Powders.
Watts' Red Lotion.
Hair-Restoring Ointment.
Edos, or Tasteless Purging Powder.

HARVEY'S

Great

*Protected Prices
(P.A.T.A.)*

Remedies for the Horse



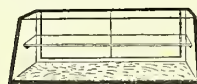
HARVEY'S

Koppos Powder.
Parasiticide.
Thrush Specific.
Hoof Ointment.
Skin Specific for Dogs.

Of all the leading Druggists' Sundries Houses
HARVEY & COMPANY, Ltd., Dublin

CHEMISTS' FITTINGS OF EVERY DESCRIPTION. NEW AND SECONDHAND.

F. MAUND & E. BERG (SHOWCASES) LTD.,
175/9 and 336 OLD STREET, LONDON, E.C.1



D. MATTHEWS & SON,
*Shop Fitters and Showcase
Manufacturers.*
14/16 Manchester St.
LIVERPOOL.

THE KWIK-SALE SHOWCASE

Suitable for all Businesses.

Plate glass sloping front. Frameless Mirror
sliding doors at back. Polished edge plate
glass shell inside. Size 3 feet long, 14 in.
back to front at bottom. 9 in. back to front
at top. 12 in. high.....£5-10-0

PITMAN'S LATIN FOR PHARMACEUTICAL STUDENTS By J. W. Cooper, Ph.C., & A. C. McLaren

In eleven fortnightly lessons the authors provide sufficient
instruction to enable the student to write prescription Latin
accurately. The book is soundly planned and interesting
to study. - - - - - 6/- net.

PITMAN'S, Parker Street, Kingsway, London, W.C.2

D.D. & POISONS REGISTERS

PRESCRIPTION BOOKS, &c.
FOR CHEMISTS, DOCTORS AND HOSPITALS.
30 Patterns. List on application.

H. T. WOODROW & CO. Ltd., 3 Cook St., LIVERPOOL
Phone - - - - Bank 730.

SALES—SATISFACTION

for YOU

When you sell Sherley's Dog and Cat Medicines you have the satisfaction of knowing that your Customers will be Satisfied, and they will come again. These popular lines are renowned for their Purity, Safety and

for Your Customers

Efficacy, and the Extensive Advertising Campaign which is always in operation ensures a steady and continuous demand. They show good profits and are supplied on terms which eliminate all risk of loss.

**DOG
OWNERS
ARE
INSISTING
ON
SHERLEY'S**

SHERLEY'S DOG & CAT MEDICINES

QUANTITY TERMS

—are available for SHERLEY'S Tonic & Condition Powders and Worm Remedies—now packed on attractive Display Cards. Also for £2 Assorted Parcels.

Full Literature and Sales-Compelling Show Cards are available. Send a Postcard for particulars to:—

A. F. Sherley & Co., Ltd.,
18 Marshalsea Road,
LONDON . . . S.E.1.

**LACTOL AND
LACTOL BISCUITS**

**A YEAR'S
EFFECTIVE
ADVERTISING
For Less than
3/6 per week**

THIS IS THE TITLE of an interesting folder describing something altogether new in the way of advertising that we have prepared for you, Mr. Retail Chemist—something that will help you to maintain and *increase* sales during these difficult times, at a price well within your means.

Worth Investigating

Don't You Think So?

As printers for chemists for over a century, we have had ample opportunity of studying the chemist's selling problems, and we have used the knowledge thus gained for YOUR benefit. So send for this folder NOW—before you forget about it—and find out all about this advertising scheme.

Address
Enquiries
to

SUTTLEY & SILVERLOCK, LTD.

Head Office: 92 BLACKFRIARS ROAD, LONDON, S.E.1

Publicity Dept.: MORLEY HOUSE, 314 REGENT STREET, W.1



CARTONS

FANCY BOXES

SHOWCASES

FOLDING BOXES, WIRE-

SEWN BOXES, PRINTED and

EMBOSSSED LABELS, SHOWCARDS, &c

•EST•
1842

M
B

May we quote YOU?
JOHNS, SON & WATTS
LIMITED
40 CITY ROAD, LONDON, E.C.1

PHONE: CLERKENWELL 1128

GRAMS: JOHNS PHONE LONDON

WE SUPPLY
DECORATED TINS
FOR PACKING
OINTMENTS

AND OTHER PRODUCTS.

SAMPLES AND PRICES UPON REQUEST.

THE CALDICOT TIN STAMPING WORKS LTD.

CALDICOT, Nr. CHEPSTOW, Mon.

Increase Your Developing and Printing Service!

Make use of our really useful series of D. & P.
books, also our Printed Aids to Selling.
Interesting range of samples post free.

BURALL BROS. The Patent Label Factory,
WISBECH, CAMBS.

HORNBY'S TINS

For all chemists' purposes

WRITE NOW for samples and prices.

HORNBY & CO. (HULL) LTD.

36 HIGH STREET, HULL

POWDER BELLOWS



ALUMINIUM SCREW CAPS for Tablet Bottles

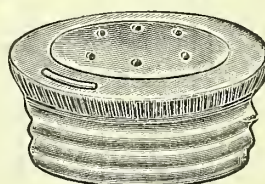
**Baker Metal Stopper
Co., Ltd.,**

RELIANCE STOPPER WORKS,
261 Icknield Street,
BIRMINGHAM.

Telegrams :
"Screwcap",
Birmingham."

Telephone :
Northern 1562

SPRINKLER CAPS



& SCREW CAPS in all metals
including Nickel Silver and Gilt for Face
Cream Pots, Frozen Cologne Containers, &c.

Aluminium CONTAINERS

Buy British

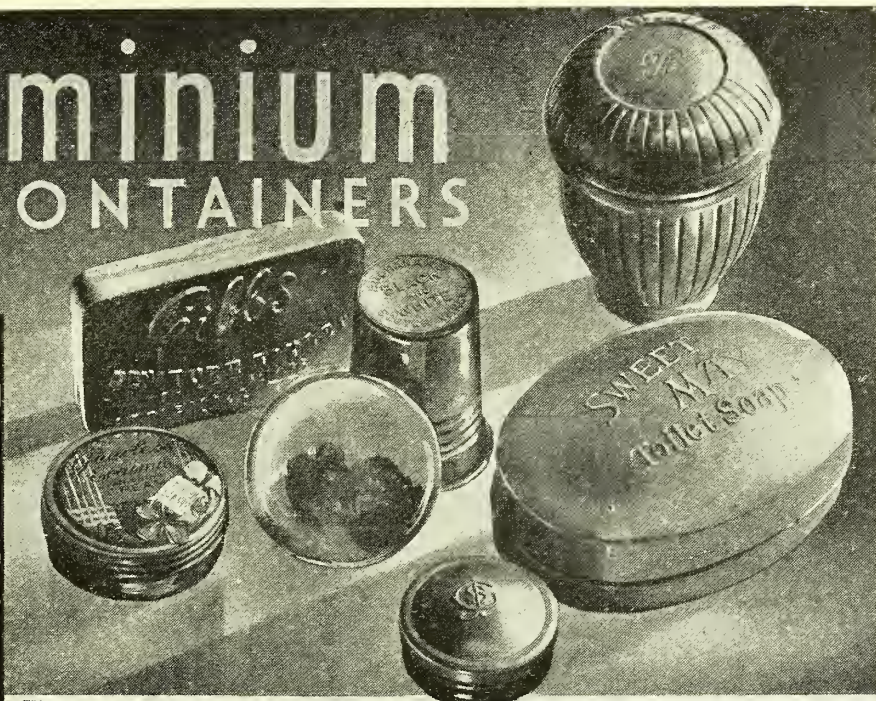
Compact Boxes
and
Vanity Cases

in enamelled, plated
and relieved finishes.

SCREW CAPS
AND CONTAINERS IN ALL
METALS

AT LOW PRICES WITH
PROMPT DELIVERY.

Advice without charge.
Quotations to your
needs.



CORFIELD Limited

'Phone: Wimbledon
5542 (5 lines)

TRAFALGAR WKS., MERTON, S.W.19

Before bringing out your *NEW LINES* please allow us to submit
suggestions in our

TRANSPARENT CONTAINERS

and **WRAPPERS** of every
— description in —

GELATINE
"PLIAPHANE"
VISCOSE-
CELLULOSE
"CELLUSINE"
"PLIACELLE"

in any shape and size

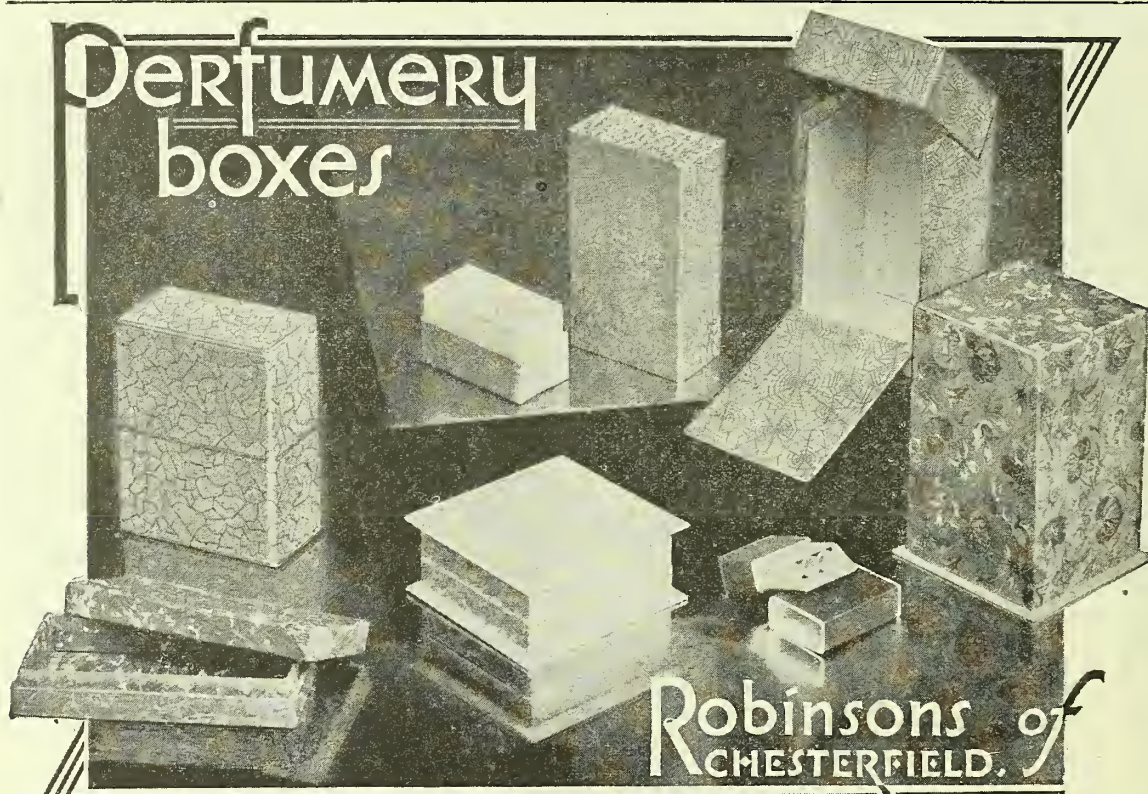
—:—

'Phone: Royal 4137



LANGHECK & CO. LTD., 5 New London St., LONDON, E.C.3

Perfumery boxes



Robinsons of
CHESTERFIELD.

WHEAT BRIDGE MILLS, CHESTERFIELD & 168, OLD STREET, LONDON, E.C.1.

Whose Money?

WHEN mistakes, forgetfulness and temptation take toll of the takings . . . whose money is short?

Wholesalers, assistants, rent, rates, taxes and other overheads must be paid. Whenever cash leakages occur IT IS THE PROPRIETOR WHO LOSES.

That is why thousands of retailers throughout Britain declare that their adoption of a

National
CASH REGISTER

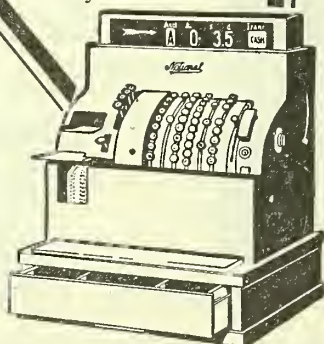
is the best investment they ever made.

"NATIONALS" embody every Cash Register feature of proved value. They not only reveal and stop profit leakages . . . they enable alert retailers to INCREASE profits, and to do it with much less work and worry.

Full details about a "National" that will meet your needs exactly await your request. Write and tell us your problems to-day. Every machine is offered on easy terms and enquiry involves no obligation.

Address enquiry to:—

NATIONAL CASH REGISTER Co. Ltd.
225 Tottenham Ct. Rd., W.1
Phone: MUSEUM 9811



ESTD
1817

SPECIALISTS
WILKINSON'S
PHARMACISTS'
PRINTING.

*We quote, and are quoted,
for Excellent Workmanship.*

JAMES F. WILKINSON,
PENDLETON, MANCHESTER.

Pharmaceutical Products,
Perfumery, Toilet Requisites,
Soap, etc., etc.



are well
protected, yet visible
and attractive when
wrapped in

Cellophane

THE FIRST AND FOREMOST

TRANSPARENT WRAPPING

REGD.

TWO TYPES OF CELLOPHANE

THERE are two types of CELLOPHANE—Standard and Moisture-proof. They look alike but are different in their protective characteristics. Both have 100% transparency and sparkling lustre. Both are dust- and air-proof, grease- and oil-proof. MOISTURE-PROOF CELLOPHANE has the additional advantage of being impervious to moisture and vapour. It preserves the original freshness and flavour of a product—sealing in the natural moisture or protecting against absorption of moisture from without.

The particular need of your product will determine the proper type of CELLOPHANE to be used.

Supplied in Sheets, Reels, Bags, Printed, etc.

The Cellophane Company, Ltd.
6-9 Bird Street
London, W.1

PARAFFINUM LIQUIDUM B. P.

EXTRA HIGH VISCOSITY HOLROYD'S OIL & CERESINE CO., LTD.
3 New London St., London, E.C.3. 'Phone: 3395 Royal. Wires: Errickroy Pen.

GUMS

TRAGACANTH
and ARABIC

As Imported or Finely Powdered

WHITE SHELLAC

FREDK. FINK & CO., 10 & 11 Mincing Lane, London, E.C.3
Telephone: ROYAL 5094.

PHOSPHATE OF SODA, Pure

For Food Purposes

ASK FOR SAMPLE AND PRICES

PERRY & HOPE, LTD.

Forth and Clyde Chemical Works, NITSHILL.

Telephone: Giffnock 414 (2 lines).

Telegrams: "Perryope, Nitehill."

REGD.
Anti-Thrax
SAFE BRUSHES
Holborn 6000



SHADEINE

FOR TINTING GREY HAIR

This popular article is largely advertised and stocked by all Wholesale Houses.

Trial size 8d. per doz. ... 6/-

1/4 size, per doz. ... 12/-

2/6 size, per doz. ... 24/-

3/8 size, per doz. ... 36/-

The SHADEINE Co. 58, Westbourne Grove, London, W.2

Applied before work keeps hands clean

ROZALEX

Applied at night prevents chapped hands

Extensively used by

HOUSEWIVES, GARDENERS, MOTORISTS, ENGINEERS, PAINTERS, etc.

6d. Tubes. Displayed on showcards containing one doz. Also packed in attractive display cartons containing two doz. 1/- Tubes. Packed in similar display cartons containing one doz. 1/6 and 2/6 aluminium containers in cartons. Obtainable from usual Wholesaler or direct. Trade terms and attractive show matter sent on request.

ROZALEX, LTD, Yorkshire House, Cross St., MANCHESTER.

BEST ITALIAN ESSENTIAL OILS

Limon - Bergamont - Orange - Lime - Neroly
Petit-Grain - Lavander Peppermint ect.

Naturals and Terpenless
ask for samples and prices

ESPERIS - Via Bollo, 4 - MILAN (ITALY)

THE OPTICAL PRESS

64 MATHER LANE,
LEIGH, LANCS.

SEND FOR FREE SAMPLES

Senna

FROM OUR OWN GROWERS

Alexandrian & Tinnevely
Pods Leaves Siftings

John Ronaldson & Co. 15 Seething La., London.

"DEPENDABLE TOBACCO WHOLESALEERS"

MIXED PARCELS A SPECIALITY

Established Fifty Years

Price Lists mailed on request.

SINGLETON & COLE, LTD., CANNON ST., BIRMINGHAM

IT IS AN INDISPUTABLE FACT 'H.M.G.'

in its improved form is the best CAPPING SOLUTION yet obtainable.

NEW ERA WORKS,
FITZGEORGE ST. COLLYHURST,
MANCHESTER.

H. MARCEL GUEST, Ltd.

Telephone: Collyhurst 2644

"MUNA" Service D & P

Daily Collection and Delivery in Birmingham area.

Same Day Postal Service.

ENLARGEMENTS. Colour Work.

Munns Bros. Ltd. 45/57 Summer Row

DISCOUNT

40% & 2 1/2

Birmingham

STILL THE BEST PASTILLE ON THE MARKET AFTER 40 YEARS

PROCTOR'S PINELYPTUS PASTILLES.

Write for advertising material

NUMOL, LTD., NEWCASTLE-ON-TYNE



DRY BATTERIES

SELL ALL THE YEAR ROUND
PIFCO carry a twelve months' storage guarantee and only cost 4 1/2d. subject.

Illustrated Catalogue free.
85 PIFCO HOUSE - MANCHESTER

Cachet machines

to suit all Dispensing Requirements.

WRITE FOR ILLUSTRATED LIST.

THOS. CHRISTY & CO., 4-12 Old Swan Lane, LONDON, E.C.4.



A SWAIN BLOCK

**JOHN
SWAIN**

AND SON LIMITED

Photo-Engravers by all Processes

**89-92 SHOE LANE
LONDON + E.C.4**

*If used in your
Advertisement*

MAKES A BIG IMPRESSION



A free Postcard enlargement with each film developed and six prints.

"QUALITY"

being our motto is the reason we have been compelled to enlarge our works to cope with our always increasing clientèle for

DEVELOPING & PRINTING

The 'Owl' Advertising and Photographic Service, Louth.

Tel. No. 226



Competition does
Not make him blink

Photopress for Excellence

Send us all your Spools for Developing and Printing. You will satisfy your customers and yourself, by promptness as well as by quality.

PHOTOPRESS

Johnson's Court, Fleet Street, London, E.C.4

FREE $\frac{1}{2}$ -doz. 1/- Veldt Cream

WITH EACH ORDER VALUE £2
(INCLUDING SOAP)

Example—12 doz. 5d. "Veldt"
Cream costs 40/-, with Bonus
Yields 66/-, i.e., approximately 40% on
turnover.

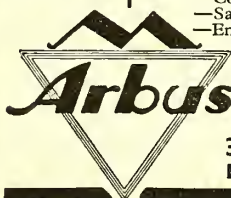
"Veldt Cream"
GOOD SHOW MATERIAL
WELL & CONSISTENTLY
— ADVERTISED —
Write for
Particulars to
VELDT LABORATORY
Springfield, Upper Clapton, LONDON, E.5

● ARBUS DEVELOPING and PRINTING SERVICE

'Phone :
Holborn
6886

First class work at highest possible speed. All makes of papers used. 'Phone for a messenger to collect your orders. ::

- Collection twice daily in London.
- Same day postal service for country orders.
- Enlargement made from best negative of each spool. No charge if returned.



40% discount, with an additional 5% for weekly settlement.

**34 GREAT JAMES STREET
Bedford Row, LONDON, W.C.1**



WE OFFER A BOTTLE CAPPING

GIVING THE FOLLOWING
ADVANTAGES:—

*Speed of operation—
Perfection of finish—
Minimum waste.*

IN STANDARD COLOURS:
BLACK, RED, WHITE or BLUE

Special colours and shades to order.

PRICE:

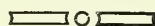
12/- to 15/- per gallon
according to quantity.

*May we give you the pleasure of testing it?
Write for sample C.S.1 to:—*

DOPE DEPARTMENT,
British Celanese Limited, Celanese House,
Hanover Square, London, W.1.

"Print More Sell More"

To no other field of activity
does this Printer's Slogan
apply with greater force
than to Chemists' Printing



CARTONS : LABELS : ENVELOPES

Kinross

Broughton Market, EDINBURGH

DISTILLED WATER AT

$\frac{1}{3}$ d. PER GALLON

By using Brown's Patent Automatic Water Stills pure distilled water may be obtained at the above cost, using steam at any pressure between 30 and 100 lbs. per square inch. The product is pure distilled water, not condensed water from steam service pipes.

Full particulars free on application. Enquiries are not followed by personal call.

MADE ALSO FOR GAS HEATING

BROWN & SON, LTD

Alembic Works, Wedmore St., London, N.19



Let the "GEM"
make money for you

Write for particulars and
name of local agent to the
manufacturers:—

**THE GEM
AUTOMATIC WEIGHING
MACHINE COMPANY
LIMITED**

48 NEW CITY ROAD
GLASGOW, C.4

EXPORT—Buy now on favour-
able Exchange Rate

SEND FOR ILLUSTRATED PRICE LIST OF
SEALING MACHINES, GUMMED TAPES, ETC.



LIGHTNING AUTOMATIC SEALING MACHINE

A beautifully-made machine and will take tape up to 1½" wide and 500' long, wound glue outside. One motion of the lever cuts, damps and delivers tape up to 8" long or any prearranged length at 1" intervals. Finished in tangerine cellulose. Price 45/-.



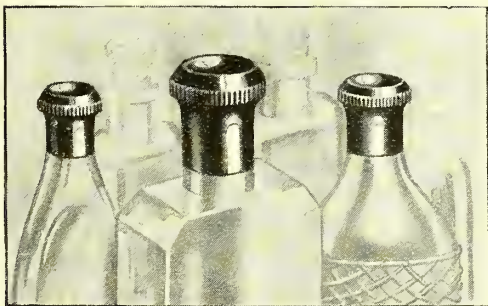
REGD. TRADE MARK

SAMUEL JONES & CO. LIMITED

BRIDEWELL PLACE, LONDON, E.C.4



Bottles with Bakelite Caps get Front Line Display



Why not investigate the possibilities of Bakelite Mouldings?

Write for particulars and literature R.R.4

The lustrous appearance of Bakelite Moulded Bottle Caps is a strong sales aid, and the adaptability of Bakelite Mouldings to caps of every size, shape and colour is attractive to the manufacturer anxious to improve the appearance of his products and to reduce his packaging costs.

BAKELITE

Registered



Trade Marks

TREFOIL

BAKELITE LIMITED, 68 VICTORIA STREET, LONDON, S.W.1

Telephone: Victoria 5411 (4 lines)

Works: Birmingham (Est. 1910)

A solid basis for the building of your business is formed by the therapeutically most active and yet inexpensive glandular products.

DESICCATED POWDERS, SOLUTIONS (for hypodermic use)
OVARIAN HORMONES PITUITARY (Post. Lobe) EXTRACT

THYREOIDEA
ORCHITIC
OVARY
CORPUS LUTEUM
PITUITARY BODY

PARATHYROID
LIVER
ADRENALIN
HOG'S STOMACH

Manufactured by :

**CHEMICAL WORKS of GEDEON RICHTER
LIMITED, BUDAPEST X**

More than thirty years of scientific experience in the domain of
organotherapeutics guarantee the reliability of our products.

Sole Distributors for the United Kingdom :

PAINES & BYRNE, LTD.
31 SOUTHAMPTON ST., FITZROY SQUARE, LONDON, W.1

Dimol

PULVERETTES

Keratin Coated or Sugar Coated.

SNUFF or Insufflator Powder.

In Tubes, 1- ; and Tins of 1 lb... 15/-

Special Insufflators 3/6

Pocket Distributor 1/9

— ALSO —

OINTMENT.

LAVAGE POWDER.

SYRUP.

OBTAINABLE FROM ALL WHOLESALERS

Distributing Agents :

SANGERS, 258 Euston Rd., N.W.1

DIMOL LABORATORIES, Ltd.,
40 Ludgate Hill, London, E.C.4

We are direct importers of

L A R G E	S T O C K S	SHELLAC	I M M E D I A T E	D E L I V E R Y
		(all grades)		
		BEE'S WAX		
		(all grades)		
		BENZOIN (Sumatra)		
		GUMS		

SAMPLES AND PRICES ON APPLICATION

THEW, PARTRIDGE & Co. Ltd.

Lustra Works—Soho Square, Liverpool

Maclean's Revalenta

*The Perfect Food for
Children, Adults and Invalids*

This gold medal food has the
reputation of over half-a-century.

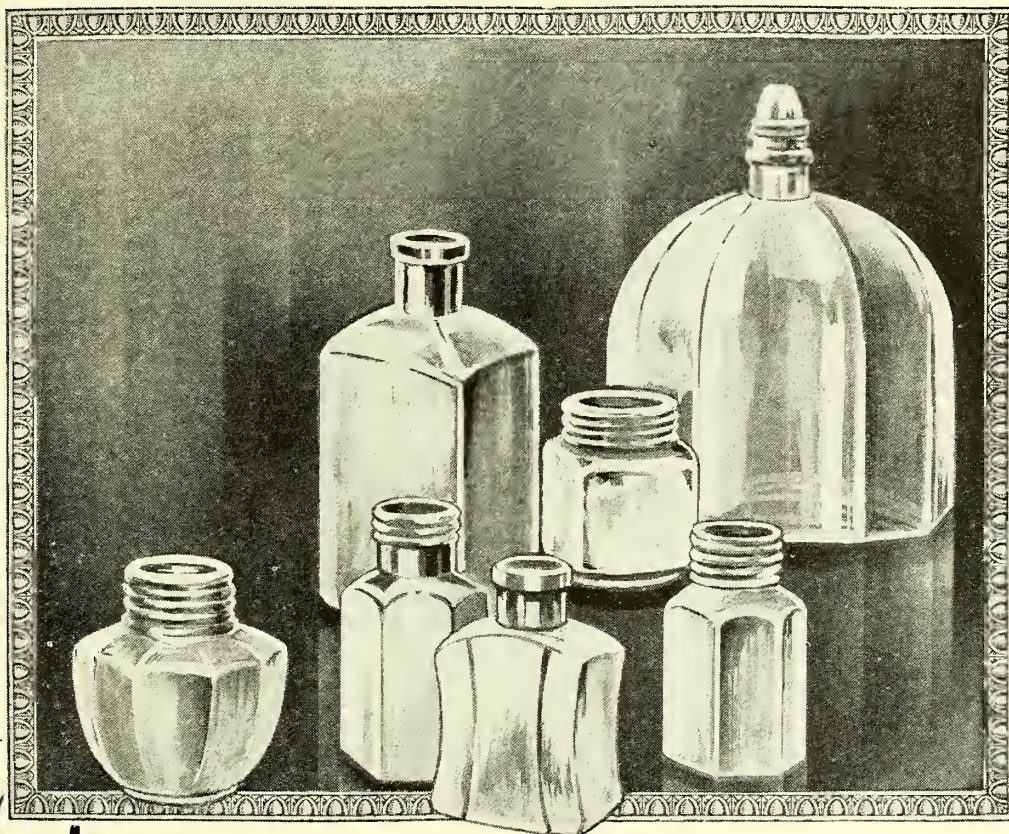
Retail Prices ... 2/-, 4/- and 11/-

Manufacturers and Proprietors :

RAIMES, CLARK & CO., Ltd. - EDINBURGH

London Agents :

BUTLER & CRISPE and MAY, ROBERTS & CO., LTD.



Bottles

and Containers of Distinction

A reputation of over 80 years is behind each bottle we make. Sturdy, accurate, and well-finished, they add to the appearance of the finished article. We make all kinds—medical flats, poison, embrocation, sauce, perfume, feeding bottles, jam jars, etc. Keenly competitive in price. You can be sure of better British Bottles when you ask us to quote.

FREDERICK HAMPSON

PERSEVERANCE GLASS WORKS

SALFORD

LANCS

Telephone :
Trafford Park 0814/5

Telegrams :
"Attention, Salford"



LOOK TO YOUR STOCKS

FOR THE BIG SUMMER



SELOCHROME

ROLL

FILM

MULTI COATED
HIGHLY ORTHOCHROMATIC

ANTI-HALO

MANUFACTURED IN ENGLAND BY ILFORD LIMITED, ILFORD, LONDON

TRADE



MARK

WRIGHT'S
COAL TAR SOAP

WRIGHT'S
LYSOL

WRIGHT'S
DISINFECTING FLUID

THREE LINES OF MERIT

Show Material on Request

BRITISH MADE — BRITISH OWNED

WRIGHT
LAYMAN & UMNNEY
LIMITED
SOUTHWARK, LONDON

dubarry's
toilet luxuries
appeal irresistibly to
the discriminating
woman



The
dubarry perfumery
Co. Ltd.

COPYRIGHT DESIGN OF THE DUBARRY PERFUMERY CO. LTD., ROVE, ENGLAND

THE CHEMIST AND DRUGGIST SUPPLEMENT

28 ESSEX ST.
LONDON, W.C.2

JUNE 25, 1932.

This Supplement is inserted in every copy of The Chemist & Druggist.

THE CHEMIST AND DRUGGIST SUPPLEMENT

ADVERTISEMENT TARIFF

ALL ADVERTISEMENTS are PREPAID, so that remittance must accompany instructions in each case. If it be necessary to telephone or telegraph an urgent announcement this may be done, provided the money is telegraphed at the same time.

BUSINESSES WANTED and for **DISPOSAL**, **PREMISES TO LET**, **PREMISES WANTED**, **PARTNERSHIPS**, **GOODS FOR SALE** and **AGENCIES**—6/- for 50 words; every additional 10 words or less, 6d. (Box No., 1/- extra.)

SITUATIONS OPEN—6/- for 40 words; every additional 10 words or less, 6d. (Box No., 1/- extra.)

SITUATIONS WANTED—2/- for 18 words; every additional 10 words or less, 6d. (Box No., 1/- extra.)

LEGAL NOTICES, TENDERS, AUCTIONS, and all specially-spaced announcements, 1/3 per nonpareil line (12 lines=1 inch single column). (Box No., 1/- extra.)

MISCELLANEOUS (Wholesalers') Section for odd and second-hand lots—10/- for 60 words; 1/- for every additional 10 words or less. (Box No., 1/- extra.)

EXCHANGE COLUMN (for Retailers, etc.)—Twopence per word, minimum 2/- (Box No., 1/- extra.)

THE CHEMIST & DRUGGIST, 28 Essex St., Strand, London, W.C.2

Telephone: Central 6565 (8 lines). Telegrams: "Chemicus, Strand, London."

CLOSING FOR PRESS.

MUST REACH US
NOT LATER THAN

ALL ADVERTISEMENTS INTENDED FOR
INSERTION IN THIS SUPPLEMENT
FIRST POST THURSDAY MORNING.

ORRIDGE & CO.

56 LUDGATE HILL, E.C.4

ESTABLISHED 1846

Telephone No.: CITY 2283

May be CONSULTED at their Offices on MATTERS of SALE, PURCHASE & VALUATION.

1.—LONDON, W.—Good-class Family Dispensing Business, with Kodak Agency; increasing turnover, last year being over £5,500; double-fronted shop, well fitted and stocked; held on lease at moderate rental; price £2,200, or possibly valuation terms would be entertained.

2.—HENDON (Near).—Good-class Retail and Dispensing Business, with Kodak Agency; established many years; returns last year £5,504, with gross profit approximately one-third; double-fronted shop, in excellent locality; oak fixtures; good stock; 15 years' lease; price £2,250, or offer.

3.—WILLESDEN.—General Retail Business, with large Dispensing; in present hands 30 years; returns last year £1,793 (neglected); double-fronted shop, with small living accommodation; rent £86 per annum; 14 years' lease; stock and fixtures worth approximately £500; price to be arranged. Further details on application.

4.—OLD-ESTABLISHED City Business for Disposal; returns last year £3,939, with gross profit £1,543; books audited; single-fronted shop, in splendid position; stock and fixtures worth approximately £1,200; lock-up shop; lease has 12 years unexpired; price asked £2,250. Further details on application.

5.—ESSEX (Suburban).—Good-class Retail and Dispensing Business; premises occupy a commanding corner position in main road; recently established; returns between £30 and £35 weekly; stock worth approximately £500; held on long lease; scope for large increase; terms, value of stock and fixtures only; part-payment entertained.

6.—SOUTH-EAST LONDON (Good-class Locality).—General Retail and Dispensing Business, with Kodak Agency and N.H.I.; returns last year approximately £3,200, increasing; gross profit exceeded £1,200; double-fronted shop, very well fitted and stocked; rent £100 per annum; 16 years' lease; price asked £2,600, or possibly valuation terms would be entertained.

7.—HERTS.—Family Retail and Prescribing Business, with Optical, about £100 per annum; returns last year £1,668, with net profit £556; double-fronted shop; stock and fixtures worth approximately £800; rent £85 per annum, rising to £100; good house; price asked £1,250.

8.—ESSEX COAST.—Good Medium-class Retail and Dispensing Business, with N.H.I., about £60 per annum; returns

exceed £3,000 per annum, with scope for increase; corner shop, well fitted and stocked; splendid living accommodation; very low rent; exceptionally long lease; for quick sale vendor will accept £2,250; or valuation of stock and fixtures, plus an agreed sum for goodwill.

9.—SOUTH WALES.—Good-class Country Business, with splendid Optical connection; established five years; increasing turnover, last year being £2,600, under management; stock worth approximately £800 and fixtures £300; seven-roomed house, with small garden; rent £200 per annum; long lease; price £1,000, or valuation.

10.—SOUTH COAST.—General Retail Business; no N.H.I.; returns, under management of a lady, £20 weekly, with gross profit 40 per cent.; single-fronted shop, in main road; stock and fixtures worth £190; living accommodation; rent £110, inclusive of rates; price £250.

11.—MIDLANDS.—Light Retail and Dispensing Business; returns last year exceeded £2,000 at good prices; audited accounts; double-fronted shop, well fitted and stocked; property may be purchased or lease would be granted at moderate rental; price £1,250.

12.—SOUTHEND.—Neglected Business for immediate Disposal; returns under management about £1,100 per annum; single-fronted shop, well fitted and stocked; living accommodation attached; new lease will be granted at moderate rent; price for quick sale £600; scope for increase under personal supervision.

13.—HAMPSHIRE.—High-class Family Retail and Dispensing Business, with Kodak Agency and Optical department; returns approximately £2,500 per annum; double-fronted shop, very well fitted and stocked; very good house and garden; rent £160; 20 years' lease; price £2,100, or valuation of stock and fixtures, plus £400 for goodwill. The Optical stock and fixtures need not be taken unless required.

14.—SUSSEX (Seaside).—High-class Dispensing Business for Disposal; returns first year £2,447, with scope for large increase; very good profits; large shop, handsomely fitted and very well stocked; good living accommodation; rent £125; lease has 13 years unexpired, with option of renewal. The property can be purchased if required; valuation terms would be entertained.

Chemists' Transfers, Valuations for Sale, Stocktaking & Probate

SPECIAL TERMS FOR INCOME TAX VALUATIONS

BERDOE & FISH

41 ARCYLE SQ. KING'S CROSS, W.C.1

ONE MINUTE FROM KING'S CROSS AND ST. PANCRA'S STATIONS.

PHONE
TERMINUS 3574

Chemist Valuer and Transfer Agents

ESTABLISHED
1870

1.—NEW FOREST.—Select Family and Dispensing Business, charmingly situated and easily worked; turnover £1,600, increasing; excellent modern house, with large well-stocked garden, garage and $\frac{1}{2}$ acre of land adjoining Forest; price for business and freehold property £3,850; suitable for anyone with capital seeking a pleasant country life.

2.—SOUTH COAST RESORT.—Good-class Family and Toilet trade; easily worked; returns £1,536; net profit £325; audited figures; rent £50; house attached; stock and fixtures worth £800; price £1,250.

3.—MIDLANDS.—Old-established Business in central position of busy market town; returns average over £1,450; plenty of scope; good house; same hands many years; price valuation, plus small goodwill.

4.—ESSEX (Near Coast).—Light Mixed Retail, with good Photographic trade; returns £2,150, audited accounts; low rent; on lease; good position; fully stocked; price £1,450.

5.—WEST MIDDLESEX.—Sound Light Cash Retail; in same hands many years; retiring; returns £1,569 last year; gross profits £615; main road position; stock worth £500; price £800.

6.—LONDON, W.—Good-class Family and Dispensing with Photo; returns over £3,300, audited figures; good main road position; double-fronted shop, well fitted and stocked; price £2,200, or valuation terms arranged.

7.—LONDON, E.C.—Good-class City Business, close to busy station; returns under management about £4,000 last year; audited figures; excellent stock. Further particulars on application.

8.—SUSSEX COAST.—High-class Business in best position of select health resort; returns last year £2,500, increasing; should do at least £3,000 this year; modern well-fitted pharmacy, with convenient house; valuable lease; very heavy stock; price £2,500, or valuation terms arranged.

9.—HERNE BAY.—Well-established, good-class Family Business in growing district; no immediate opposition; returns last year £1,850; scope for increase; good house; long lease; offers invited.

10.—DEVON (Seaport Town).—Light Cash Retail, in thickly populated district; returns last year £1,039; good profits; scope for increase; illness compels sale; price £460, or first reasonable offer.

11.—WEST OF ENGLAND (Market Town).—Old-established Retail and Agricultural Business; returns last year £1,550; plenty of scope; low rent; house attached; valuation terms arranged; in all, between £800 and £900.

12.—NORTH LONDON (Good Residential Suburb).—Well-established good-class Business, pleasantly situated; returns last year over £2,100, under management; scope for increase; handsomely-fitted pharmacy, with house attached; long lease; valuation terms arranged, about £1,500; personally recommended.

13.—SURREY (BANKS OF THAMES).—Cash Drug and Photographic Store, showing steady increase; returns last year £1,500; net profit £374; lock-up shop; stock worth £500; price £860.

14.—LONDON, S.E.—Light Suburban Retail, in main road position; returns £1,400, with ample scope for increase; attractive shop, with flat over; owner retiring; price, simply valuation of stock and fixtures, about £450.

SPECIAL NOTICE TO INTENDING VENDORS

We have genuine cash buyers requiring businesses in all parts, and particularly for the following Midlands and Northern Counties, showing net profit £1,000 upwards, capital up to £4,000 waiting: London, Southern or Home Counties. Good class business, returns £4,000 upwards, must stand 2 assistants, ample capital for right business. Devon, Cornwall or S. West Counties. Coast or inland. Turnover about £3,000. House preferred, not essential, capital available up to £2,500. Correspondence cordially invited which will be treated in the strictest confidence.

S. F. CLARK, F.N.A.A. ^{Phone: 3365}

CHEMISTS' VALUER & TRANSFER AGENT

34 Marksbury Avenue, Richmond, Surrey

VALUATIONS for sale, purchase, probate, and Income Tax purposes, personally conducted in any part of the British Isles.
ACCOUNTS audited, BALANCE SHEETS certified.
BUSINESSES (all districts) available and required.
Enquiries solicited.

The ASSOCIATION of MANUFACTURING CHEMISTS,

LIMITED

(Business Agency, Transfer & Valuation Department)

KIMBERLEY HOUSE, and at EXCHANGE CHAMBERS,
Holborn Viaduct, LONDON, E.C.1 2 Bixteth St., LIVERPOOL

PARKIN S. BOOTH, Valuer. Tel.: CITY 1261-2-3-4.

VALUATIONS. SALES OF BUSINESSES. STOCKTAKINGS.

Enquiries invited.

JOHN BRIERLEY, F.N.A.A.

CHEMISTS' VALUER AND TRANSFER AGENT,

135 Queen Street, Newton Heath, MANCHESTER

Doncaster (near)—Drug Store, ret. £950 p.a., modern house, £425.
Doncaster (Suburb), exclusive offer, returns £2,400 p.a., £1,100.
Southampton—Returns £1,750 p.a., £1,275. (Another £550.)
Berkshire.—Returns £1,600 p.a. (very profitable), price £1,000.
Others, Birmingham, Harrogate, Bolton, etc. (Tel.: Falsworth 1913.)

THOS. TOMLINSON & SON

CHEMISTS' VALUERS & EXPERT STOCKTAKERS

46 Victoria Street, MANCHESTER (Opposite "Woolleys")

^{Phone: Marple 332.}
"Grams": "Tomtom," Manchester.
FOR DISPOSAL—West Coast—Returns £2,000, good house, lease; £1,500 or val. terms. Inland Resort—Returns £1,500, well fitted, low rent, £1,000 or nr. offer. Manchester—Ret. £2,000, large N.H.I., living accom., val. terms. Warrington (nr.)—Ret. £1,500, beautifully fitted, suit Opticians, £700 a.a. Others—Yorks (W.R.), Lancs, North and Mid Wales, &c.

BUSINESSES FOR DISPOSAL.

6s. for 50 words or less; 6d. for every additional 10 words or less, prepaid. (Box No., 1s. extra.)

FYLDE DISTRICT.—Well-established, good-class Chemist's Business; returns for past three years approximately £1,200 per annum; reasonable rent, with lease; excellent, commodious house attached, with all conveniences; nice garden, etc.; genuine and sound offer, which will stand any investigation; valid reason for disposal; price £700. No triflers entertained. Brierley, Chemists' Valuers, 135 Queen Street, Newton Heath, Manchester. (Tel.: Falsworth 1913.)

LEEDS (Main Road, City).—Old-established Business; Kodak and Rexall Agencies; good new stock; turnover approx. £1,000; suit beginner; owner removing; price £600 for quick sale or nearest offer. Apply 219/40, Office of this Paper.

LONDON, N.W.—High-class Pharmacy and Optical Business for Disposal; residential area; chiefly private dispensing (profitable); established six months, with an average of £30 weekly; unlimited scope for further development; prospects very promising; beautifully fitted and stocked; 21 years' lease; rent £175; price, complete, £850. 220/7, Office of this Paper.

MANCHESTER (Suburb).—Exclusive and genuine first-hand proposition; returns average for past three years approximately £2,400 per annum, auditor's figures; smart modern double-fronted lock-up shop, good position, main road, shopping area; nice middle-class district; reasonable rent; lease; valid reason for disposal; price £1,100. No triflers entertained. Brierley, Chemists' Valuer, 135 Queen Street, Newton Heath, Manchester. (Tel.: Falsworth 1913.)

MIDLANDS.—Old-established Chemist and Grocery Business for immediate Disposal; qualification essential; N.H.I. between £70 and £80; nearest chemist three miles away; good opening for young man with business ideas and energy; books shown to bona-fide inquirers. "Country," 220/21, Office of this Paper.

MIDLANDS.—Mixed Business, small, Grocery and Chemist's; country district; present proprietor infirm. Apply "Chemico," c/o Southall Bros. & Barclay, Ltd., Lower Priory, Birmingham.

NEAR Kingsway (Main Road).—Well-fitted and stocked Pharmacy for early disposal; lease 15 years unexpired; rental £225; sub-let £250; takings under management average £35 per week at 40 per cent. gross profit. A sound proposition, capable of extension. Proprietor compelled to sell as he is leaving Drug Trade. Price £1,250 or near offer. Inquiries to P.C.B. 39/27, Office of this Paper.

ROSSENDALE VALLEY.—Well-established Family Business, easily worked and very profitable; lock-up, with store-rooms, etc.; main road; returns average £1,500 per annum and fairly good N.H.I.; well fitted and stocked, with usual agencies; genuine offer and well worth attention; price, including property (vendor's own), £1,400. No triflers, please. Brierley, Chemists' Valuer, 135 Queen Street, Newton Heath, Manchester. (Tel.: Failsforth 1913.)

TO Multiple Firms and Others.—Unique offer; Yorkshire (important town); very old-established City Business; commanding position shopping centre; returns £5,000 per annum; valuable proprietaries and over 12,000 N.H.I. scripts annually; sound, genuine offer; price £3,000. Further particulars to principals only. Brierley, Chemists' Valuer, 135 Queen Street, Newton Heath, Manchester. (Tel.: Failsforth 1913.)

FOR Sale, old-established Pharmacy in country town; owner retiring; only bona-fide applicants considered; references required; living accommodation; easy rent. 219/32, Office of this Paper.

BUSINESSES WANTED.

LONDON AND DISTRICT.—Business required with scope for increase, doing at present £25-£30 weekly; living accommodation preferred; price £600-£850. All replies treated in strict confidence. 205/359, Office of this Paper.

MIDLANDS OR SOUTH.—Private pharmacist, with full capital, requires sound, genuine Business, capable of showing a net income of £1,000-£1,500 per annum; living accommodation preferred, but not essential; open to negotiate immediately for suitable proposition. All replies treated as strictly private and confidential. Ernest J. George, Sentinel House, Southampton Row, W.C.1. Telephone: Museum 8340.

CHEMIST, having recently disposed of his business in the South, is anxious to secure a genuine proposition in a healthy locality, preferably within easy reach of Worcester; living accommodation on premises preferred; turnover £2,000-£5,000 per annum; capital available for immediate purchase. Reply in strict confidence to 205/358, Office of this Paper.

PRIVATE Chemist wishes to negotiate for genuine Business (with assistance); capital available for immediate purchase of good concern. No agents, please. References exchanged. All data will be regarded as confidential. Free for immediate interview. 219/38, Office of this Paper.

WANTED, in Lancashire, Cheshire or Derbyshire, genuine Retail Dispensing Business; turnover approx. £1,800-£2,000 per annum; living accommodation essential; cash waiting for suitable proposition. 219/31, Office of this Paper.

AGENCIES.

FIRM of Manufacturing Chemists, with good range of Packed Goods and Toilets, requires active, established Agency to handle their lines, including Galenicals, in South Coast or South-West Counties. Agency must have own delivery and travellers experienced in the Drug Trade. Good profits assured. Full particulars to 205/354, Office of this Paper.

REPUTABLE Australian Firm, with first-class manufacturing and selling organisation, would be pleased to hear from manufacturers of Chemist Proprietaries, Patent Medicines, etc., with a view to having their goods introduced on to the Australian market on a royalty basis. Representative at present in London. Write, giving particulars, to Box 482, c/o Street's, 8 Serle Street, London, W.C.2.

WEB-KURA, LTD., Knaresborough, Yorks, require additional Manufacturers' Agents, S. Africa, N. Zealand, Australia, S. and E. Counties, England; experienced and strictly honest salesman only, for their 3d. Foot Pads and 2d. Nerve Powders.

PREMISES FOR SALE.

POPULAR.—Shop and Five Rooms; good spot for Chemist; densely populated district; vacant possession; price £850, freehold. Wm. Clarkson & Partners, 87 East India Dock Road, E.14.

TO Doctors.—Detached House, four bedrooms, three sitting-rooms, bath and separate lavatory, with annexe for waiting-room and surgery; private entrance, garage and ground; good opening for live doctor; good district. Offers for the property to McNamee, Gt. Crosby. Phone 561.

PARTNERSHIPS.

TEDDINGTON, Feltham, Isleworth, Hampton or Hanworth.—Wanted, established Chemist open to consider setting up of Optical Department on Partnership basis with qualified Optician. Apply 219/25, Office of this Paper.

PREMISES TO LET.

LARGE Lock-up Non-basement Shop, with exit at rear; suitable high-class Chemist, etc.; frontage approx. 27 ft.; floor area exceeding 600 sq. ft. (or would divide). View. Landlord, 3-5 Burlington Gardens, Old Bond Street.

DAVENTRY.—A Lock-up Shop in the best business thoroughfare, frontage 17 ft., to be Let on Lease for either 3, 5 or 7 years at £52 per annum, tenant paying rates. Only one Chemist in the town to supply about 5,000 people. Sam Robbins, Ltd., Auctioneers, Rugby.

LOCK-UP Shop, No. 98 Taylor Street, Blackburn, used as Drug Store past 40 years, to Let, 12s. 6d. per week. Apply E. & B. Haworth, Solicitors, 7 Lord Street West, Blackburn.

APARTMENTS.

RESIDENTIAL CLUB FOR GENTLEMEN.

HAMPDEN CLUB, Hampden Street, N.W.1, close to King's Cross Station. Large club rooms. 300 bedrooms and bed-sitting rooms, 15s. to 25s. per week. Illustrated Prospectus, Secretary. Museum 3424.

SITUATIONS OPEN.

RETAIL (HOME).

LONDON, S.E.—Required, shortly, qualified Manager; middle-aged preferred. Reply, giving full particulars of experience, salary expected, and when disengaged. "Gentian," 220/40, Office of this Paper.

LONDON, E.16.—Qualified Assistant, age 25/30, for branch in working-class district; energetic and capable man essential. Full particulars, 220/38, Office of this Paper.

S.W.15.—QUALIFIED Assistant required, either sex, over 30; easy berth; full or part time; morning and evenings. Full particulars and salary, which must be moderate. Applicants not answered five days respectfully declined. 219/37, Office of this Paper.

ASSISTANT, young, qualified, to manage small Birmingham business; salary and good commission on profits. Apply, with all details, Southall Bros & Barclay, Ltd., Birmingham.

CHEMIST'S TOILET COUNTER.—Well-educated young lady with selling ability required for the above; must have good knowledge of Face Creams, Powders and Toilet Articles generally. Apply, stating previous experience, age, and salary required, to Secretary, Timothy Whites, Chemists, Portsmouth.

HOLIDAY RELIEF, S.W. DISTRICT.—A young, experienced, energetic, qualified Assistant required for Dispensing and Counter from July 11 to 23; also lady, unqualified, with knowledge of practical Pharmacy and Dispensing, from August 2 to 13 inclusive; no Sunday duty; English or Scotch (no Welsh). Apply, giving fullest particulars of experience, age, height, salary required (outdoors). 67 Windermere Road, Coulsdon, Surrey.

JUNIOR Assistant for season, accustomed to good-class Retail, Photo Sales and Window-dressing. Write, stating salary, etc., Windle & Co., Ltd., Chemists, Station Road, Swanage.

LADY Assistant; Counter. State experience, salary, if disengaged. Miss Herbert, Herbert's Drug Stores, 209 Vauxhall Bridge Road, S.W.1.

LADY Assistant, qualified or unqualified, for season; East Coast; used to Counter, Toilets and Photography; good address. State age, height, and salary required (indoors). 220/15, Office of this Paper.

LOCUM.—Qualified Locum required, August 1 to 14. Full particulars of experience and salary to "M.P.S.," 20 Compton Avenue, Barking Road, London, E.6.

LOCUM.—Woman from August 15 to September 3; Hospital experience essential; part time. Oliver, New Sussex Hospital, Windlesham Road, Brighton.

MANAGER, Herbalist Business in South of England; conversant with Herbal Prescribing. Apply, with full particulars of experience, age, salary required and when at liberty, to "Herbalist," 217/9, Office of this Paper.

QUALIFIED Assistant wanted for July 18; permanency if suitable; courteous and obliging; Photography, Window-dressing. Apply Johnston's Cash Chemists, 194 Trundley's Road, S.E.8.

QUALIFIED Assistant wanted, age about 25 to 30; Dartford district; good Dispenser, Conter work and Window-dressing, in a small business; salary offered £3 10s. to £4. State age, height and full particulars of experience. Apply P.C.B. 39/18, Office of this Paper.

REQUIRED, qualified Locum, young, July 16 to 30 inclusive; N.H.I.; no Sundays. State age and inclusive remuneration, etc. Hudson & Son, Dispensing Chemists, Gibbet Street, Halifax.

UNQUALIFIED Assistant required for two weeks, commencing July 11; quick and accurate Dispenser essential. Apply, giving all particulars in first letter, to Morgan, 75 Woodbridge Road, Guildford.

WHOLESALE.

IRISH FREE STATE.—Good opening for competent experienced Manufacturing Chemist, thoroughly conversant with formulae and processes of Manufacture of General Toilet and Medicinal Preparations; excellent prospects and liberal terms to suitable applicant. Give fullest particulars, in confidence, first letter. 220/27, Office of this Paper.

MAKTOR SAFETY RAZOR CO., LTD., 26 Stamford Street, London, S.E.1, can offer an additional commission line to reputable Representatives with existing live connection amongst Chemists and Hairdressers; London and provinces. Replies should state territory and lines carried.

REPRESENTATIVE required by manufacturers to sell to Chemists first-class range of Specialties sold under "Known, Admitted, and Approved Remedies Concession"; salary and commission; progressive position; suit smart young chemist's assistant who is a real salesman; correspondence treated in confidence. Write F. W. Hampshire & Co., Ltd., Derby.

REPRESENTATIVES, with personal connection among London Chemists, wanted to introduce new line; half a guinea will be paid for each approved chemist who agrees to take a reasonable quantity spread over one year. Write to Medi-Chem Tea Sales Dept., 527 Harrow Road, London, W.10.

REPRESENTATIVES for high-class Toilet Preparations, with live personal connections amongst Chemists, Ladies' Hairdressers, Beauty Parlours, Stores, etc., are required for selected provincial areas by well-known manufacturing house; must provide evidence of sales ability; non-competitive lines not objected to; commission only. Full particulars first letter. 205/360, Office of this Paper.

THE IRRO-SUN CO. require extra Representatives in the following districts: London, 2; South Coast, 2; Midlands, 2; West and North, 2; good commission and excellent prospects for the right men. State territory covered and other usual particulars (in confidence). Apply 220/3, Office of this Paper.

TO gentlemen having sound connection with Wholesale and Retail Chemists. The M.M.T.P. Co. are widening the scope of their activities (for their popular pack in carton) and offer a profitable proposition to Commission Salesmen in centres where not already represented. Write for terms of this daily commodity, with unlimited prospects; give particulars, ground covered, lines carried. The Miss Muffet Toilet Paper Co., 1 Julian Road, West Bridgford, Nottingham.

COLONIAL, INDIAN AND FOREIGN.

INDIA.—Messrs. Bathgate & Co., Wholesale and Retail Chemists, Calcutta, require a Qualified Assistant, with experience since qualifying; age not over 25, single; four years' agreement; passage paid out and home; salary, which starts from date of sailing, first year Rs. 400 monthly (about £30), second year Rs. 425 (about £31 17s. 6d.), third year Rs. 450 (about £33 15s.), fourth year Rs. 475 (about £35 12s. 6d.). Write, giving particulars, to Z. A. 756, care Deacon's Advertising Agency, 5 St. Mary Axe, London, E.C.3.

SITUATIONS WANTED.

RETAIL (HOME.)

A.—**LOCUM**, qualified; long or short period; experienced all branches; active; excellent references; terms moderate. "S. C. J.", 54 Priory Road, West Hampstead, N.W.6. Phone: Maida Vale 8212.

A. **CAPABLE**, unqualified Assistant; sound experience all branches; excellent Prescriber; up-to-date progressive ideas; permanency or Locum. "Statim," 220/11, Office of this Paper.

A. **FEW** hours' daily employment wanted by elderly qualified Pharmacist. "Galen," 81 Elgar Road, Reading.

A. **THOROUGHLY** reliable, unqualified, tall Assistant; 20 years' first-class experience, Dispensing, Counter, Photo; seaside, country, London; disengaged; moderate salary. Johnstone, 3 Babington Road, Streatham, S.W.16. Phone 1087.

A. **YOUNG** lady Dispenser, qualified (Hall), desires post; Brighton district; good references. "B.", 42 Carlisle Road, Hove.

A. **S** **LOCUM**.—Advertiser; 39; unqualified; 20 years' good-class Retail; seaside experience; season engagement accepted; excellent references. "Rhei," 12 Benn Street, Rugby.

A. **SSISTANT**; unqualified; 31; experienced all branches; good Prescriber and Salesman; Manchester and suburbs. "Ambitious," 45 Clarence Street, Gorton, Manchester.

A. **SSISTANT**; unqualified; reliable; middle-aged; experienced all branches; good Salesman; references; disengaged. Gall, 53 Cambridge Street, Norwich.

A. **SSISTANT**, age 21, tall, requires post during season, July 8-October; 3½ years' experience high-class Pharmacy, Dispensing, Photographic; quick Counter-hand; passed Optical Examinations. 220/30, Office of this Paper.

A. **SSISTANT**, 22, tall, seeks vacancy during summer season; disengaged July 8-October; 5 years' sound experience; Dispensing, Photographic, quick Counter work; excellent references. Jones, 11 Claude Road, Cardiff.

A. **UGUST**.—Qualified Locum, with first-class West-End, Coast and provincial Dispensing experience; sound references; free July 25. 220/35, Office of this Paper.

B. **RANCH** Manager, 28, qualified, desires change; conscientious and energetic worker; excellent Salesman and Counter-hand; comprehensive experience; confidence in ability to increase takings; excellent references; would take financial interest if required. "Chemist," 108 Clements Road, South Yardley, Birmingham.

C. **HEMIST** requires position with a view to early succession or Partnership in a really good business; considerable capital available; advertiser is of good education and address, with sound experience in all branches of Retail Pharmacy; now free for interview. Apply (in confidence) to "J. B.", 219/380, Office of this Paper.

E. **XPERIENCED**, qualified Chemist, aged 24, tall, desires permanency (or Locums); South England; free June 27 onwards. Write "M.P.S.", 103 Gower Street, London, W.1. Phone Museum 8500 Monday morning.

I. **MPROVER**, 21, tall, just finished P.S. Course, requires situation; excellent references and experience in high-class Dispensing, Private and N.H.I.; free on July 11. 218/30, Office of this Paper.

L. **ADY**, qualified, M.P.S., F.S.M.C., J.C.Q.O.; permanency; tall; good experience; capable Dispenser and Refractionist; disengaged July 2. 11 Dogo Street, Cardiff.

L. **ADY**, experienced, qualified, booking summer Locums; salary £4 10s. one week, £4 4s. two or more weeks; London district preferred. Phone: Southall 1522. Victoria E. Evans, 4 Station Parade, Northolt.

L. **OCUM**; qualified; well experienced; abstainer; now booking up; moderate terms. 219/30, Office of this Paper.

L. **OCUM**, qualified, every experience, desires appointments; continuous repeated references; indoors or outdoors; engaged July 18-30, Biggleswade; August 29-September 12, Andover. "Chemist," 36 St. Stephen's Road, Norwich.

L. **OCUM**; thoroughly conscientious worker, with excellent references; free; London or provinces; unqualified. "A. B.", 131 Mount View Road, N.4.

L. **OCUM**; unqualified; waiting Part II result; free July 4; Midlands preferred. Ellis, 37 Perry Street, Wednesbury, Staffs.

L. **OCUM**; qualified; registered R.P.U.; disengaged June 27 to July 3, July 25 to August 13 inclusive; any distance; experienced. Wood, 33 Union Road, West Croydon.

L. **OCUM**; good all-round experience; West-End Dispensing; aged 48; disengaged July 17 till August 1. "M.P.S.", 9 West Street, Epsom. Phone 9614.

CLEAR OUT—your Old or Damaged

Stock of Photo Goods
Why keep them any longer? Turn them into CASH.
I GIVE BEST PRICES for Old Films (damaged, fogged or expired dates); Packet Papers. Cards (any sizes). Old Photo Goods or Cameras. Bromide Papers. Plates (all sizes, all makes). Send any goods in the photo line. I buy all, good or bad. Cash per return. A good price for all Cameras. Send them along.

S. E. HACKETT, 23 July Road, Liverpool

MANCHESTER TUTORIAL COLLEGE
327 OXFORD ROAD, MANCHESTER

J. E. GRIME, B.A., B.D. } Directors of Studies.
 V. J. SANSOM, B.Sc.

REVISION COURSES for PRELIMINARY SCIENTIFIC EXAM. start OCTOBER, JANUARY, APRIL & JULY.
FULL COURSES for MATRIC. and PHARM. PRELIM.

LOCUM; experienced; competent; reliable; highest references; town or country; disengaged; dates open. "Chemicus," 56 Rudloe Road, Balham, S.W.12.

LOCUM, qualified, 10 years' management, tall, active, open to receive any dates up to September. Leon, Chemist, Newark.

M.P.S., F.B.O.A., F.S.M.C., F.I.O., registered J.C.Q.O., wide experience, excellent references, seeks position in South Wales or near. "Boaz," Lynch Gate Café, Llandaff, near Cardiff.

QUALIFIED, also F.S.M.C. (J.C.Q.O.), desires change; Chemist or Chemist-Optician; high-class training; private and quick N.H.I.; practical knowledge Photography; good French. Middleton, 127 Waterloo Road, Romford. Romford 505.

QUALIFIED; experienced; over 50; quick, accurate Dispenser. Thorley, 27 Crouch Hill, N.4.

QUALIFIED lady, 26, desires permanent post; 6 years' Dispensing, Counter, Window experience; tall; good appearance; excellent references. 221/4, Office of this Paper.

SPECIAL capabilities in Northern Agricultural business; middle-age; 5 ft. 10 in.; good appearance; qualified; £3 10s. "Chemist," 1 Birrage Green Lane, Ripon.

UNQUALIFIED Assistant; experienced; London; quick Counter work; practical knowledge Photography; no Sunday duty. 92 Adelaide Road, Shepherd's Bush.

WHOLESALE.

A FIRST-CLASS Representative, age 30, with 9 years' strongly established connection amongst Chemists in London, last 4½ years representing well-known Dentifrice House, requires engagement with reputable house; own car. 220/22, Office of this Paper.

A SUGAR COATER, 24, and Medicinal Tablet Manufacturer desires position with progressive company; inventor of an improved process whereby brilliant coated work is obtained, the finest in the trade; absolutely reliable, with highest references. Write 220/6, Office of this Paper.

EXPERIENCED Representative, 12 years' connection Chemists and Stores in London, suburbs and Kent, desires engagement; highest references; own car. E. A. Lawrence, 26 Albion Road, Bexley Heath, Kent.

PERFUMER, Toilet Soap and Perfumery, practical man, manufacturing Creams, Tooth Paste, Shampoos, Hair Lotions, etc.; good compounder and organiser. "W. W.," "The Chase," Earl D'Essex Chase, Laindon, Essex.

QUALIFIED, young, experienced Medical Detail Representative, requires progressive position; personality; appearance; knowledge Therapeutics, Organotherapy, etc.; resident London. 216/39, Office of this Paper.

SUCCESSFUL Representative, with own car, covering South Coast, calling on Chemists and Stores, etc., open to carry further lines on commission, plus part expenses. Box H., c/o Knights, 55 Chancery Lane, W.C.2.

FOR SALE.

(Articles to the value of £5-£50.)

KODAK Auto-focus Enlarger, retail price £10 17s. 6d., shop soiled, otherwise perfect; Kodak Film Tank, with transfer box, two metal cups, two aprons, takes any size film; Houghton Turbine Print Washer, No. 2, cost £3 10s., perfect condition. What offers? 220/51, Office of this Paper.

NATIONAL Cash Register for Sale; must be sold at once; keys up to 19s. 11½d.; suit Chemist. Write A. Kirwin, 11 The Broadway, East Acton, London, W.

ALL DRUG AND CHEMICAL WORKERS

should join at once

THE NATIONAL UNION OF DRUG & CHEMICAL WORKERS

(Incorporating the National Association of Chemists' Assistants)

BENEFITS: Trade Protection—Legal Aid—Unemployment

Benefit—Free Use of Employment Bureau.

Write for particulars—**ARTHUR J. GILLIAN**, Gen. Sec.
149 NEWINGTON CAUSEWAY, LONDON, S.E.1

PHARMACEUTICAL PRINTING

We make substantial reductions during **JUNE, JULY & AUGUST** for our standard lines of printing, advert. matter, labels, etc. Now is the time to push sales in the Photo., Toilet and Holiday Equipment Depts. Our samples provide ideas and literature to develop all branches of the Pharmaceutical Business.

A Post Card will bring you full details

ELLAMS & CO., The Georgian Press
 Hanover Street, LIVERPOOL.

SURPLUS STOCK.—About 50 gross plain Pale Blue Tins, hinge lids, 2½ x 2 in. x ¾ in., perfect condition. What offers? 205/355, Office of this Paper.

"SUNICA" Mercury Lamp, complete; perfect condition; voltage 230/50 cycles; new this year; three pairs Goggles; list price lamp £18; the lot £10, or offers considered. 219/9, Office of this Paper.

MISCELLANEOUS.

A COMPLETE SET of Second-hand Fittings, nearly new, comprising 9 ft. Window Enclosure, complete with standard bars and glass shelves; 6 ft. Dispensing Screen and Drawers; 8 ft. Wall Showcase; 4 ft. Stock Fitting; 7 ft. Drug Fitting with glass knobbed and labelled drawers; 6 ft. Flat Counter Showcase; Perfume Case and Desk; Check Till; in mahogany; made in units suitable for any size shop; absolute bargain at £97 10s. Full details from or can be seen at **PHILIP JOSEPH & SONS, LTD.**, 90/92 St. John Street, Clerkenwell, E.C.1. "Pharmacy Fitters for over a Century."

A FIRST-CLASS PHARMACY, £69 10s. in OAK—10 ft. Drug Fixture, 30 drawers, solid oak fronts, two cupboards with solid oak panelled doors, oak-faced shelves, poison cupboard with plate-glass mirrored door; 8 ft. Counter, solid oak top, show case front; 9 ft. Wall Case, solid oak, show cases to top and lower sections; 6 ft. 6 in. Dispensing Screen and Counter, bevelled mirror centre; Show Case with plate-glass shelves. Call or post your requirements to **RUDDUCK & CO.**, 219/227 Old Street, London, E.C.1.

CHEMISTS' FITTINGS.—We hold an immense stock of Drug Fittings, Dispensing Screens, Glass Fronted Counters, Perfumery Cases, Nests of Drawers, Wall Cases, Silent Salesmen, Upright and Flat Counter Cases, Plate-glass Counters, Cash Tills, Display Stands and Glass Shelves, etc., ready for immediate delivery at competitive prices. Write or call for List. **F. MAUND & E. BERG (SHOWCASES), LTD.**, 175/9 and 336 Old Street, London, E.C.1.

CHEMISTS' Fittings, direct from manufacturer; soundly constructed in oak and mahogany; 8 ft. Drug Run, £18; 6 ft. Dispensing Screen, £14; 6 ft. Showcase Fronted Counter, £8 5s.; 6 ft. Wall Case, £11; 6 ft. Glass Counter, £8 15s.; Counter Case, 30 x 24 x 18, £2 5s., etc. Send now for photographs, or call and inspect. **MYERS**, Complete Chemist Fitters, 134a Kingsland Road, E.2, near Shoreditch Church. Bishopsgate 2524.

CHEMISTS' FITTINGS—MUST BE SOLD.—Drugfittings, 14 ft., 12 ft., 10 ft. and 8 ft. long; Wall Cases, 10 ft., 9 ft., 8 ft., 7 ft. and 6 ft. long; Dispensing Screens, 8 ft., 7 ft., 6 ft. and 5 ft. long; Serving Counters, all lengths; two Tallboy Cases. Also set in Oak: 10 ft. Drugfitting, 8 ft. Wallcase, 8 ft. Counter, 6 ft. Dispensing Screen, two 4-ft. nests Counter Drawers. Sketches by return. **GEORGE COOK**, The Working Shopfitter, 27 Macclesfield Street, City Road, E.C.1. 'Phone: Clerk. 5371.

EXCHANGE COLUMN.**WANTED.**

EMULSIFIER (Hand). State size, make, and lowest price to Snowdon, Chemist, Spennymoor.

COLTON or Stokes' Granulating Machine. Full particulars to Box C.4470, c/o Dawson's, 129 Cannon Street, E.C.4.

SECOND-HAND SIGHT-TESTING ACCESSORIES required by Optician commencing business. Full particulars and prices to 205/357, Office of this Paper.

SECOND-HAND DISPENSING UTENSILS and Fittings required by Chemist commencing business. Full particulars and prices to 205/356, Office of this Paper.

BUSINESSES

£4,000 - £10,000

A VENDOR WRITES :

"In recording my thanks for the work, there is one outstanding feature of your service, and that covers everything—Thoroughness for both parties."

Several clients with capital are open to negotiate immediately either for out-and-out purchase or for partnership with a view to succession. Pharmacists seeking retirement or change can forward information in full confidence, or a personal visit can be made.

Ernest J. George
TUDOR HOUSE,
WALSALL

Telephone : Walsall 3774

AND SENTINEL HOUSE,
SOUTHAMPTON ROW, LONDON, W.C.1

Telephone : Museum 8340

Correspondence, which will be treated as strictly confidential, is invited from prospective purchasers relative to the following businesses which are available for disposal privately :—

(C1) POPULAR YORKSHIRE WATERING PLACE.—Corner pharmacy with optical connection capable of extension under active management; present turnover about £35 weekly; has done £60; well fitted, with good premises and living accommodation; property to sell for £3,000 or leased at £150; stock approximately £900; fittings £300; goodwill by arrangement; negotiations must be private and confidential. (Visited and recommended.)

(C2) SOUTH-EAST (SEASIDE TOWN).—Good retail and dispensing business; returns for year ended December, 1931, upwards of £3,750; rent £90 per annum, rates approximately £30; purchase price £2,350. (Visited and recommended.)

(C3) SOUTH-EAST (SEASIDE TOWN).—Good retail business at present under management; turnover approximately £1,750; living accommodation; rent £48; lease by arrangement; purchase price, lease and goodwill £250; stock and fixtures at valuation (total approximately £600). (Visited and recommended.)

(C4) LONDON, S.E.—Good retail and dispensing business (lock-up), situated on main road, in pleasant middle-class district; turnover, as per audited accounts, for 1931-2 financial year, £1,331; rent, £55; net profits, to a proprietor running the business personally, would be approximately £350 per annum; business at present under lady management; purchase price approximately £500, including stock £275, subject to valuation. (Visited and recommended.)

(C5) LINGS. (MARKET TOWN).—Old-established retail business with good toilet and photographic trade; turnover for 1931 financial year £2,300; good living accommodation; long lease at reasonable rental; purchase price £1,400; excellent opportunity. (Visited and recommended.)

(C6) LEICESTER.—Old-established retail and dispensing business with good toilet and photographic trade; average returns for past two years approximately £2,200 per annum; small house available, at present sub-let; further particulars to bona fide prospective purchasers upon application. (Awaiting visit.)

(C7) LONDON, S.E.—Old-established business with living accommodation, at present sub-let; main road situation; inclusive rental, £54 per annum (after allowing for sub-let income, £28 per annum); N.H.I. dispensing (approximately 400 scripts monthly); returns, as per audited accounts, for 1931-2 financial year, £1,093; purchase price for quick sale, £290. (Visited and recommended particularly to a single man with limited capital, as constituting an excellent profit-earning investment.)

(C8) NORTH WALES.—Pharmacy well situated in prominent seaside resort, showing returns of approximately £40 weekly; should be capable of further increase; good reasons for disposing; purchase price, £1,150, including stock and fixtures estimated at £900. (Awaiting visit.)

(C9) NORTH WORCESTERSHIRE.—Old-established business, with optical connection, showing net profits upwards of £600 per annum; modern premises with self-contained flat; little booking; good N.H.I.; to a genuine purchaser with satisfactory references, the owner would be prepared to consider allowing part of the purchase price to remain over for a reasonable period of time to be agreed upon. (Visited and recommended.)

(C10) LONDON, S.W.—Pharmacy with optical connection, situated on main road, in prominent position, returns approximately £2,100 per annum, with good scope for increase, particularly as regards the optical side of the business. Freehold property also available, for

purchase; further particulars will be forwarded in strict confidence to genuine likely buyers. (Visited and recommended.)

(C11) LONDON (OUTER WESTERN SUBURB).—Elegantly-fitted and well-stocked pharmacy for disposal owing to private circumstances; present returns approximately £30 weekly, with good scope for substantial increase; main road situation; premises include beautiful modern house with every convenience; further particulars in confidence to bona fide prospective purchasers. (Visited and recommended.)

(C12) LONDON, N.W.—Exceptional opportunity for young qualified chemist to purchase a sound genuine business, well situated, and possessing excellent potentialities for future development, at a purchase price covering less than the value of stock and fixtures; there is good scope, and the necessary facilities for optics, if desired; business should be capable of a £2,500-£3,000 turnover; further particulars upon application. (Visited and recommended.)

(C13) HERTFORDSHIRE.—Good class retail business, at present doing approximately £30-£32 weekly, and increasing; accountant's figures available; modernised premises (lock-up); well stocked and fitted; rent, £60 per annum; further particulars in confidence, to bona fide prospective purchasers. (Awaiting visit.)

(C14) LIVERPOOL.—The manufacturers of a number of popular toilet preparations are open to dispose of their business, owing to other interests; the proprietaries in question are extensively stocked by multiple and other chemists, and the proposition would appear to offer scope for considerable development; initial capital required, approximately £500; further particulars will be forwarded in strict confidence, upon application by genuine likely purchasers. (Awaiting visit.)

(C15) NORTH CUMBERLAND.—Good retail business, with extensive sales in toilet and photographic lines; average turnover approximately £1,800 per annum, with excellent scope for further increase; premises well situated; purchase price £1,050. (Awaiting visit.)

(C16) LONDON (EASTERN SUBURB).—Exceptionally good profit-earning business showing returns upwards of £40 weekly; N.H.I. scripts average 500 to 700 per month; net profits approximately £650 per annum; long lease at moderate rental, or property could be purchased at reasonable figure; good scope for increase; reason for disposal, owing to semi-retirement; every facility granted for investigation. (Visited and recommended.)

(C17) WARWICKSHIRE.—Recently established pharmacy with splendid potentialities; present returns approximately £25 weekly and increasing; good living accommodation; further particulars will be forwarded in confidence to genuine prospective purchasers upon application. (Awaiting visit.)

(C18) MERSEYSIDE.—Good retail and dispensing business with scope for considerable development; present returns approximately £15 weekly; modern house with separate entrance; price for quick sale, £480. (Awaiting visit.)

(C19) KENT COAST.—Old-established dispensing business, at present doing approximately £30 weekly, with good scope for increase; living accommodation; rent, £120 per annum on lease; owner retiring; purchase price, £1,200. (Awaiting visit.)

(C20) BERKSHIRE TOWN.—Old-established; returns approximately £1,400 per annum; living accommodation; well capable of substantial increase; premises extremely well situated. (Awaiting visit.)